

## WBFSH webinar on Tuesday 7th December 2021, at 3-5 pm CEST

## How to bring genomic development to horse breeding?

## INTRODUCTION

In the future, new technologies and methods like genomic selection based on SNP genotype data provide great opportunities. Today, most studbooks use microsatellite markers for parentage testing. Markers tested by SNP chips can also be used for parentage testing, but the transition from microsatellite to SNP markers will require some efforts. Different transition strategies exist and have allowed moving towards SNP-based parentage testing in the Netherlands, Germany, and France. The aim of this webinar is to share experiences from routine and advanced research with the practice and to learn from each other. Perhaps the WBFSH studbooks can agree on using the same SNP chip for routine testing? And perhaps WBFSH could help using synergies, negotiate a favourable price for the chip and coordinate parentage testing in the transition phase? The webinar is for free and open to WBFSH member studbooks and their national laboratories (the laboratories have to be invited by the studbooks to be able to participate).

## **AGENDA**

- 1. What is EAAP (European Federation of Animal Science, former European Association for Animal Production), and how can the EAAP and its Horse Commission support horse breeding?

  By EAAP Horse Commission representative Kathrin F. Stock (vit, Germany)
- 2. Focus item at EAAP 2021: Genomic development and future opportunities By EAAP Horse Commission representative Kathrin F. Stock (vit, Germany)
- 3. How to bring genomic tools to horse breeding: Future parentage testing based on SNPs instead of microsatellites.
  - 3.1. Experiences from Holland

    By KWPN Breeding Researcher Daniëlle Arts (KWPN, The Netherlands)
  - 3.2. Experiences from Germany

    By Mirell Wobbe (vit, Germany)
  - 3.3. Experiences from France

    By Harmony Crichan (IFCE, France)
  - 3.4. Information from ISAG (International Society for Animal Genetics)

    By ISAG secretary Sofia Mikko (SLU, Sweden)
- 4. Discussion/summary: Will it be possible to make WBFSH recommendations regarding SNP genotyping to obtain a better price for the SNP chip for the WBFSH studbooks?