

Dr. Hélène Jammes, INRA



Dr. Hélène Jammes is team leader of team entitled « Epigenetics mechanisms of phenotype building and prediction » at French National Institute of agronomical research (INRA). She is a biologist with more than 25 years of expertise in the cell biology, molecular biology and reproduction biology including 15 years in Epigenetics. For over ten years, Dr. Jammes has managed a team of 8 permanent personnel. The present research of the team focus on the study of epigenetic marks, which control the gene expression and the programming of phenotype. The first aim is to identify epigenetic markers of health and of reproductive

robustness in dairy cattle (cows and bulls). By genome wide DNA methylation analysis, large sets of markers were identified in bull semen in response of different intrinsic and extrinsic conditions (Perrier et al., 2018) as well as in blood cells from lactating cows feed with nutrient supplemented diet or not. Using rodent model, the second aim is to identify in a context of metabolic changes of the mothers, the epigenetic processes responsible of the phenotypic programming during the foetal life having phenotypic consequences at short and long terms on the metabolic, sensorial and reproductive life of offspring. The both approaches aim to identify epigenetic markers to define new tools helping to predict the health and robustness of animals.