Individuals who generally view uncertain events as potentially dangerous are said to have a negative cognitive bias, and those who view uncertain events as potentially rewarding have a positive cognitive bias. Importantly, cognitive biases affect an individual's decisions and actions, and cognitive biases may play a role in behavior problems commonly seen in domestic animals. In this talk I will present new research showing a relationship between judgement bias and canine fear and aggression. I will also introduce my current research project with horses. The goal of this pilot study is to use a spatial discrimination learning task to identify cognitive deficits due to aging and disease, and to assess judgement bias as a potential welfare indicator.