

**Project title:** Prediction of oestrus intervals for guide dogs

**Academic conveners:** Colm Connaughton

**External partner:** Guide Dogs (contact: Rachel Moxon)

**Project description:**

Guide Dogs breeding programme needs to match the number of dogs that are bred to future demand for puppies to enter their training programme. On average bitches come into season every seven months although there is considerable variation from one dog to the next. The current prediction model used for planning purposes ignores this variation and predicts the next season start will be previous season start plus seven months. The objective of this project is to determine whether a prediction model can be built using historical breeding and population data that is more accurate than this and to validate this model for production use by planners in the breeding programme. Bonus question: how should this model be updated in the future if the predictions of the model are used in making decisions on which bitches to breed?