Dottorato di ricerca in Scienze Veterinarie XXXIII CICLO - Anno di corso: 1°

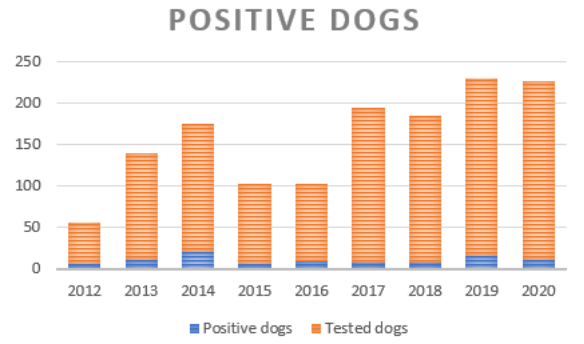
Dott.ssa Veronica Facile **Curriculum:** Sanità Animale

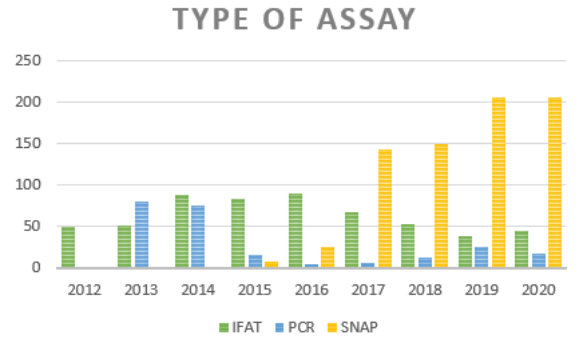
Supervisor: Prof.ssa Mara Battilani **Cosupervisors:** Prof.ssa Elena Catelli, Dott. Andrea Balboni

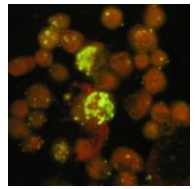
DETECTION OF ANAPLASMA SPP. AND EHRLICHIA SPP. IN DOGS FROM THE VETERINARY UNIVERSITY HOSPITAL (UNIBO): A RETROSPECTIVE STUDY 2012-2020

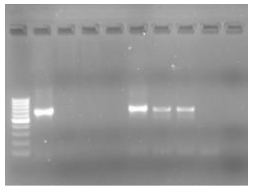
Objectives: To assess the frequency of *Anaplasma* spp. and *Ehrlichia* spp. infections in dogs tested at the Veterinary University Hospital (VUH), to evaluate correlations with clinical data, and to genetically characterise the identified bacteria.

Materials and Methods: Dogs referred at the VUH between 2012 and 2020 and tested for *A. phagocytophilum*, *A. platys* and *E. canis* with different direct and indirect assays were included in the study.









Results: 1322 dogs were included and 94 (7,1%) tested positive for at least one pathogen:

- 53 for *A. phagocytophilum*
- 62 for *E. canis*
- 1 for *A. platys*

} 24 co-infected

Significantly higher frequency of infection in mixed breed than in purebred dogs; only for *A. phagocytophilum*, in hunting dogs.

Conclusions: The results obtained expand knowledge about prevalence of *A. phagocytophilum*, *A. platys* and *E. canis* in Italy and possible risk factors in dogs. The study shows also that cross-reaction between these pathogens can sometimes occur and the frequency with which it happens will need to be investigated.

Future Proposal: Evolutionary studies of identified bacteria.

Finanziato dall'Unione europea NextGenerationEU
Ministero dell'Università e della Ricerca
Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA
ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA