## AN UPDATE ON ONGOING STUDIES: COMBINED VACCINATION WITH ANTI-GNRH (GONACON) AND ANTI- RABIES VACCINES IN CATS IN THEIR NATURAL HABITAT

## Tal Raz

Koret School of Veterinary Medicine, The Robert H. Smith Faculty of Agricultural, Food & Environment, The Hebrew University of Jerusalem, Rehovot, Israel

Free-roaming cats' overpopulation is a major problem due to negative impacts on animal welfare, public nuisance and health, as well as possible harm to wildlife. Surgical sterilization is commonly used to prevent breeding; however, it has failed to provide practical solution under field conditions. Rabies is a deadly virus which may infect people and animals. Although feral cats are commonly not a major transmitting vector of Rabies to human, in Israel, as well as in many other endemic areas around the world, animal control and rabies vaccination programs are aspired. Therefore, we are currently conducting three studies with the overall objective to examine the efficacy of Gonacon, an anti-GnRH vaccine, in combination with rabies vaccine, under field condition, in which cats remain in their natural habitat. These ongoing studies are focused on (1) owner-own indoor-outdoor female pet cats (Study 1), (2) owner-own indooroutdoor male pet cats (Study 2), and (3) a community of stray cats (Study 3). In Studies 1 and 2, owners of intact, indoor-outdoor pet female and male cats, respectively, were invited and signed a consent form to include their cats in the study. Cats were assigned to one of two treatment groups: either vaccination with Gonacon and against Rabies, or surgical sterilization and vaccination against Rabies. Cats were examined and sampled just prior to vaccination, and at 3, 6, and 12 months post-vaccination; this includes full veterinary physical examination, with focus on the reproductive system, as well as sampling of blood (for future anti-GnRH Ab titer, anti-Rabies titer; and hormonal analyses). In addition, owners were asked to fill a questionnaire every 3 months regarding the health and behavior of their cats, as well as their satisfaction from the vaccination approach. In Study 3, a community of stray cats in an urban environment was included and vaccinated with Gonacon and against Rabies. At study initiation, the vast majority of cats were trapped, examined and sampled (as in Studies 1 & 2), vaccinated, and were released to their habitat. Approximately 6 months after study initiation, a subgroup of cats was captured and sampled. Thereafter, monitoring included physical census monitoring sessions every 5 weeks in order to estimate population size. Another community of neutered/castrated stray cats in another location was also monitored in the same manner. The presentation at the ACC&D meeting will include updates regarding these ongoing studies.