## Effects of Animal-assisted interventions on the development of children with Down syndrome and children with autistic behavior

Hypothesis: The interaction with animals will have a positive supportive effect on the development of social interactions and language development in children with special needs.

We investigated the effect of Dolphin Assisted Therapy (DAT) on the development of speech/language and social behaviour in children with DS. Taking into account data from the literature our working hypothesis was that DAT improves the social and cognitive functions with respect to verbalization and thereby promotes task performance in children with DS. The parameters "verbalization", "impulsiveness", "proper understanding of rules", "recognition of persons" and "contact" were measured using Matson Evaluation of Social Skills for Individuals with Severe Retardation (MESSIER) before and after DAT as well as before and after each of the control periods. The results of this study provide support for our proposed hypothesis. Through improved "verbalization" and "recognition" the execution of tasks respectively the social skills of children with DS receiving DAT became better. Further research will include: (A) Dolphin-assisted therapy and Down syndrome (qualitative and quantitative analysis using video registration). Data collection completed. (B) The effect of equine therapy on the behavior (social interaction) of children with autism and children with Down syndrome. (C) Study of the effect of dog-assisted therapy on the oxytocin and cortisol levels of children with autism and children with Down syndrome. Measuring social interaction and language /speech development.