M.Sc. project available (2017)

Adaptations to Population Densities in House Mice

How does population density shape traits in individuals?

House mice live in populations of variable sizes and densities. Many parameters are expected to be different for mice in low densities when compared to mice in high densities. For example, the frequency of females mating with multiple males within one reproductive cycle is different between dense and sparse populations. This has consequences for the optimal energetic investment and behaviour of males, in this case whether a male should invest more into aggression or sperm production to compete successfully after copulation (sperm competition). Do males with high investment into sperm production have more offspring in dense populations, but not in sparse populations?

The aim of this project is to measure differences between mice in varying population densities to test hypotheses that are developed together. For this goal, the M.Sc. student will work together with a Ph.D. student who will set-up enclosures with varying densities as part of a larger project. The M.Sc. student will collect their own data, but will also be involved in the project overall.
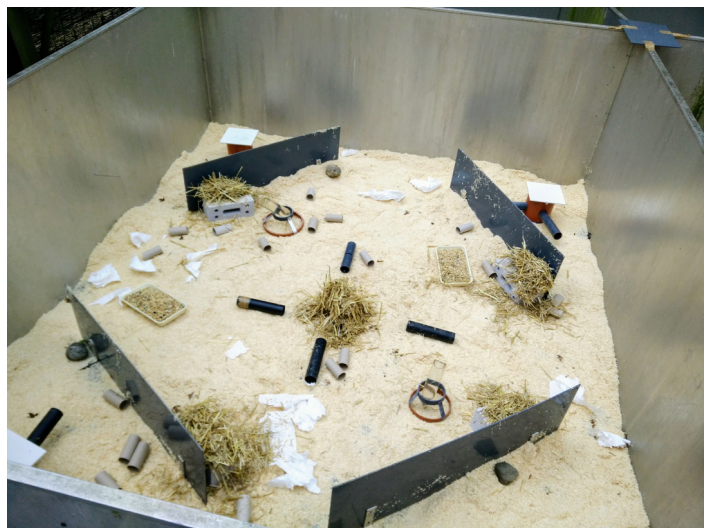
If you are interested or have any questions, please contact

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