The home cage as starting point for innovative concepts in behavioural phenotyping Symposium

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Minimal human intervention, handling and transport; undisturbed and continuous behavioural recordings; measurements of long-term and circadian processes. These advantages have made the home cage increasingly popular and acknowledged as testing environment for behavioural phenotyping purposes. Flanked by an upsurge in the number of automated home cage recording systems available on the market, the home cage is more often becoming implemented in behavioural assays and test batteries. Measuring activity under baseline conditions in the home cage facilitates the interpretation of outcomes from other, novel environment tests. However, the home cage can be equipped to serve as a testing environment for an extended number of behavioural domains, such as anxiety and cognition. This symposium presents the most recent innovations and applications in the field of home cage studies. The program is aimed at addressing different types of automated home cage systems that each have their specific methodology suitable for answering the specific questions of their users. Moreover, the symposium will focus on a variety of behavioural domains, such as locomotor activity, emotional learning, operant conditioning and anxiety. The assessment of home cage behaviour presented here is implemented in neurobiological studies combined with genetic strategies and specific disease-related research.

Symposium contents