POSTER ABSTRACT

Effects of Enrichment on Learning in the Morris Water Maze

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Environmental enrichment is added to an animal’s housing to decrease captivity-driven behaviors. It may also enhance the animal’s ability to adapt to change and stress and improve their cognitive functioning. Four month old male Fischer 344 rats were pair housed in either standard or enriched environments for 2 weeks and tested in the Morris water maze. On day 5 of testing all visual cues were removed. Enrichment consisted of more space, hidden food, and five novel objects (i.e. ladder, box, mirror, parrot toy) replaced daily. No significant differences were found on any measure of learning and memory, with or without visual cues, between groups. Future investigations will address the duration and quality of enrichment required to affect cognitive performance.