

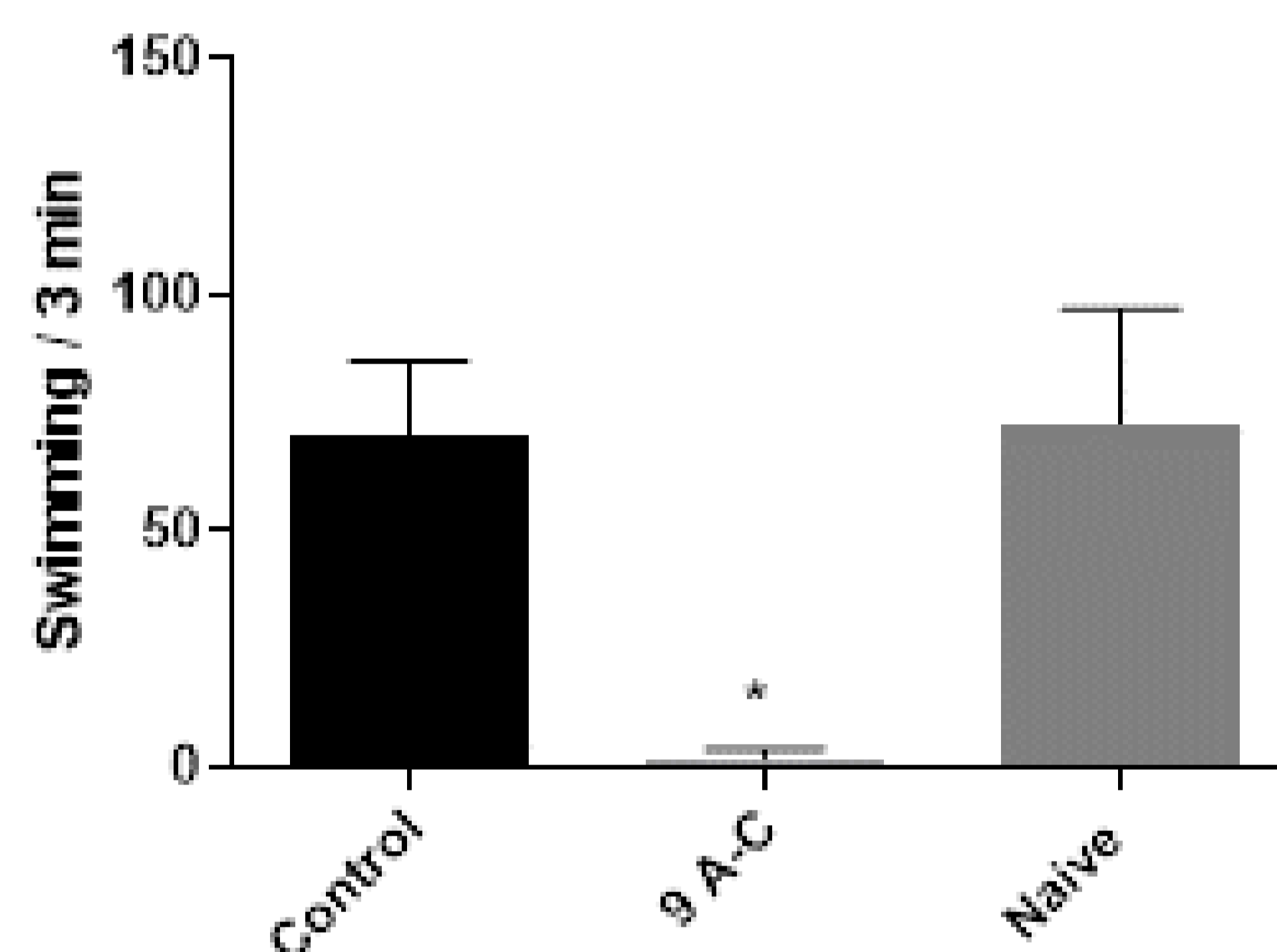
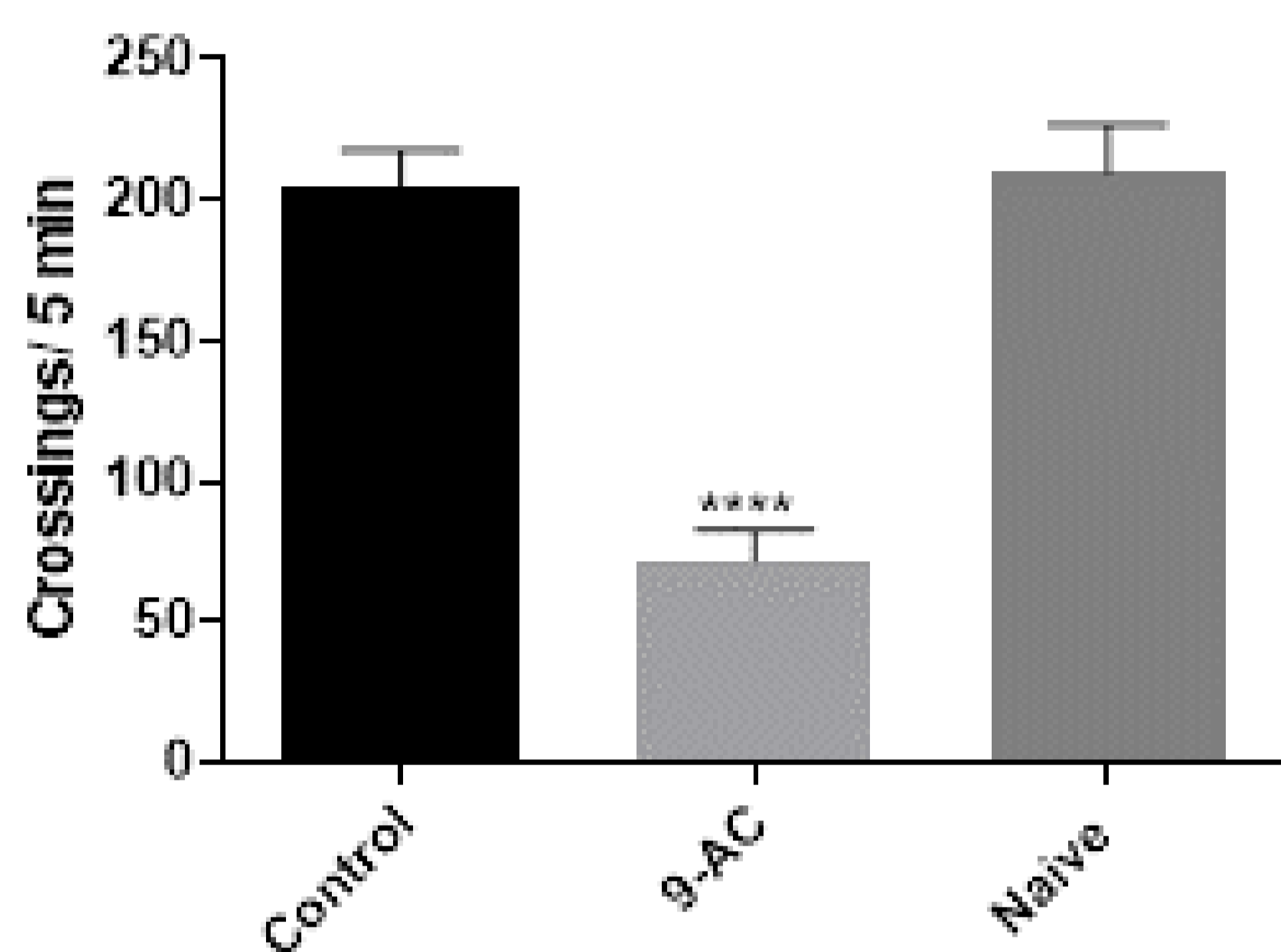
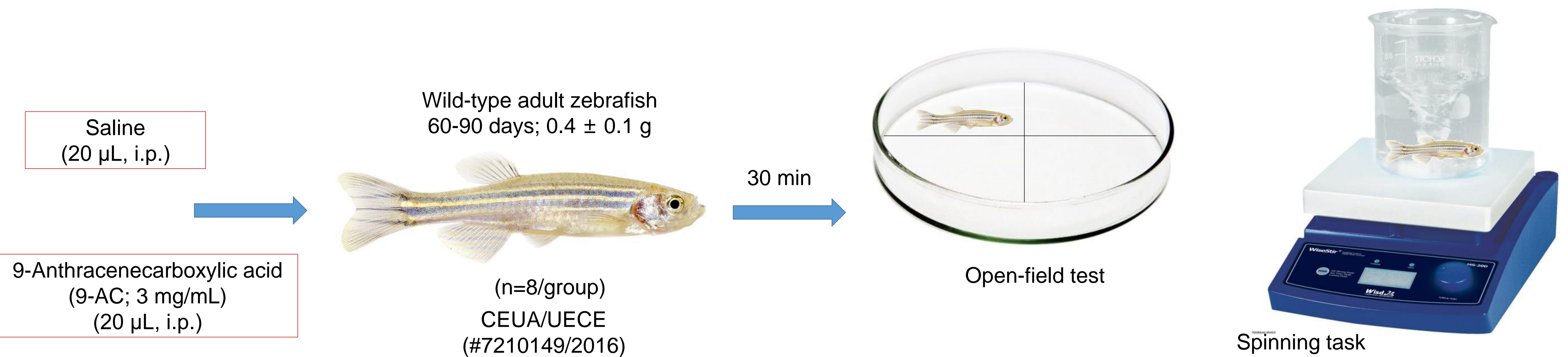
# ADULT ZEBRAFISH BEHAVIOR AS A TOOL TO STUDY MUSCULAR DYSTROPHY

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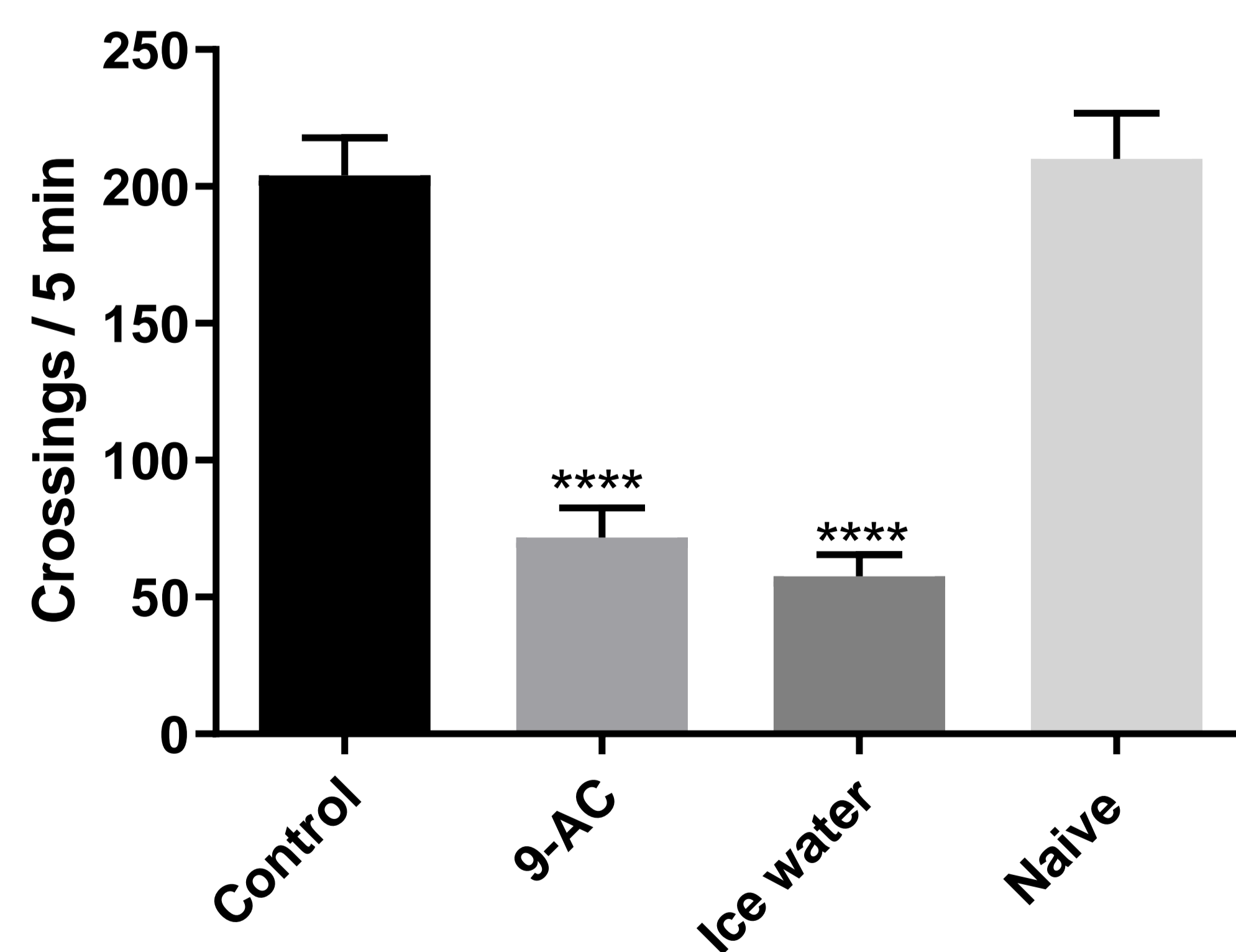
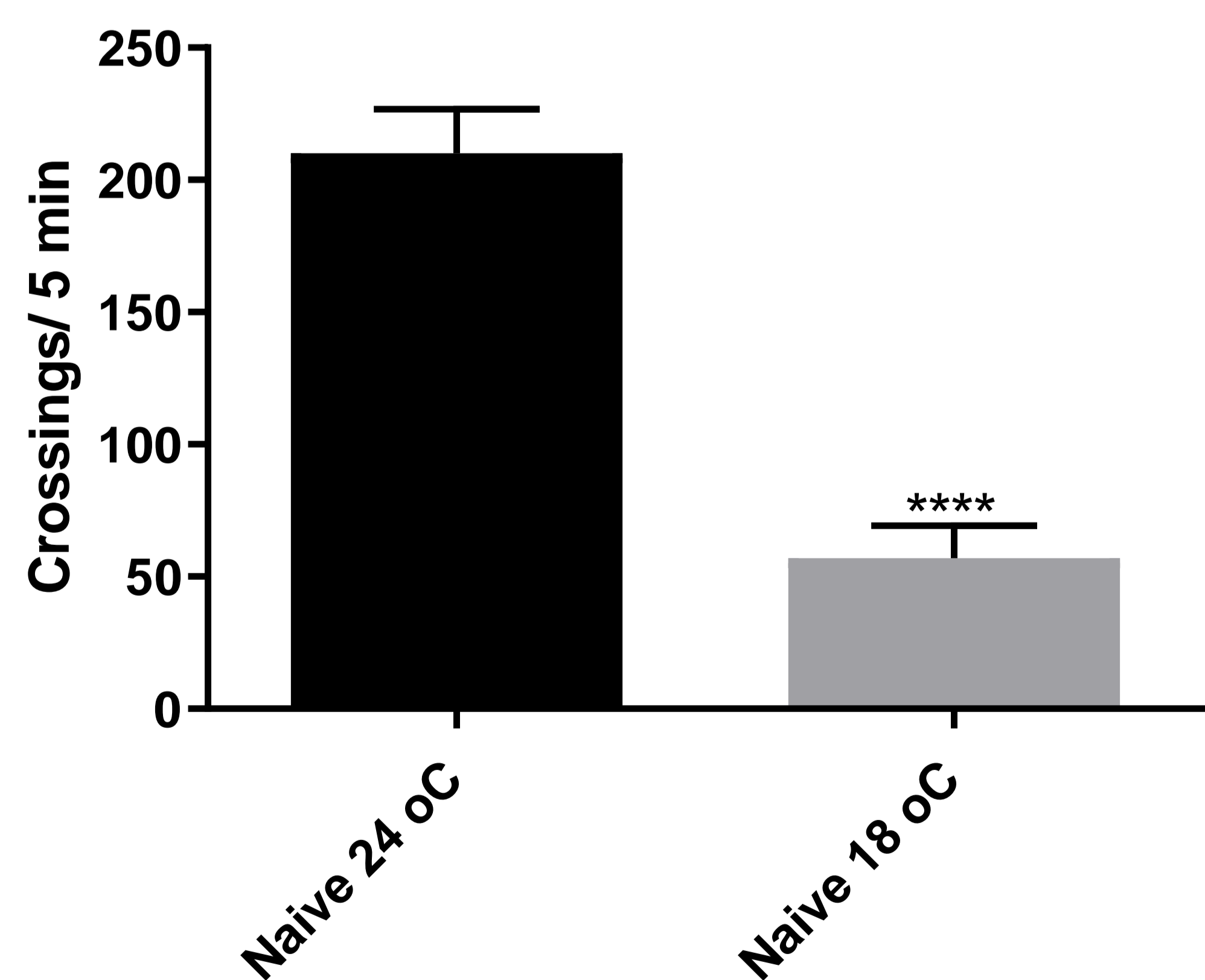
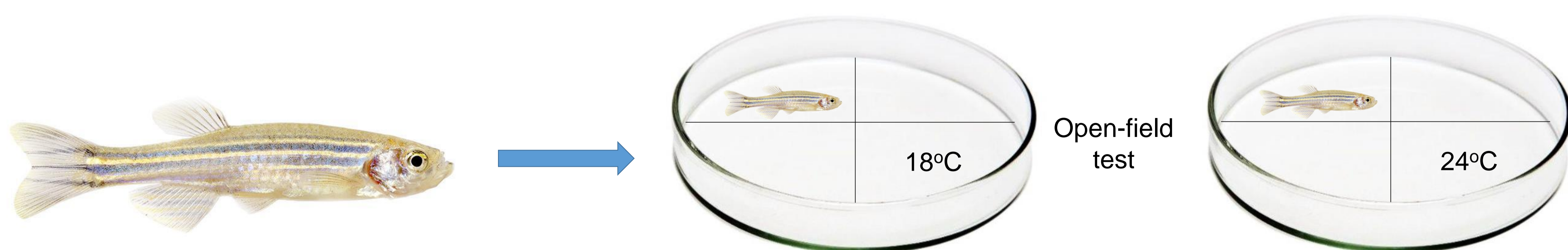


FUNDAÇÃO EDSON QUEIROZ  
UNIVERSIDADE DE FORTALEZA  
ENSINANDO E APRENDENDO

Muscular dystrophies are characterized by progressive muscle weakness that affects skeletal muscles, including those that exhibit the phenomenon of myotonia. The aim of this study was to propose new experimental models of muscular dystrophy in adult zebrafish.



Effect of 9-AC on adult zebrafish behavior in the open field test (left panel) and the spinning task (right panel). Data are presented as mean ± standard error of the mean. \* $p < 0.05$  and \*\*\*\* $p < 0.0001$  vs control and naive. ANOVA followed by Tukey's test.



Effect of ice water on adult zebrafish behavior in the open field test (left panel). Comparison between 9-AC and ice water in the open field test (right panel). Data are presented as mean ± standard error of the mean. Left panel: \*\*\*\* $p < 0.0001$  vs naive (24 °C) – t Student's test; right panel: \*\*\*\* $p < 0.0001$  vs control and naive - ANOVA followed by Tukey test.

Two new in vivo protocols for muscular dystrophy in adult zebrafish have been developed that may be useful to assess the antimyotonic activity of compounds. It is noteworthy that the proposed models are easily reproducible at low cost, favoring their use for screening new therapeutic targets.

## Acknowledgments

