

Research Using Lafayette Activity Wheels

1. **Anderson, B., J., Alcantara, A. A., and Greenough, W. T.** (1996). Motor skill learning: Changes in synaptic organization of the rat cerebellar cortex. *Neurobiology of Learning and Memory*, 66, 221-229.
2. **Anderson, B. J., Li, X., Alcantara, A. A., Isaacs, K. R., Black, J. E., and Greenough, W. T.** (1994). Glial hypertrophy is associated with synaptogenesis following motor-skill learning, but not with angiogenesis following exercise. *Glia* 11, 73-80.
3. **Anderson, B. J., Rapp, D. N., Baek, D. H., McCloskey, D. P., Coburn-Litvak, P. S., and Robinson, J. K.** (2000) Exercise influences spatial learning in the radial arm maze. *Physiology and Behavior*, 70, 425-429.
4. **Anderson, B. J., Relucio, K. I. Eckburg, P. B.** Exercise and motor skill learning increase the thickness of the motor cortex, *Learning and Memory*, 9(1):1-9 .
5. **Black, J. E., Isaacs, K. R., Anderson, B. J., Alcantara, A. A., and Greenough, W. T.** (1990). Learning causes synaptogenesis, whereas motor activity causes angiogenesis, in cerebellar cortex of adult rats. *Proceedings of the National Academy of Sciences, (USA)*, 87,5568-5572.
6. **Bronikowski, A. M., P. A. Carter, J. G. Swallow, I. A. Girard, J. S. Rhodes, and T. Garland, Jr.** 2001. Open-field behavior of house mice artificially selected for high voluntary wheel running. *Behavior Genetics* 31:309-316.
7. **Carter, P. A., S. J. Davis, J. G. Swallow, and T. Garland Jr.** 2000. Nest building behavior: a correlated response to selection for increased wheel-running activity in house mice. *Behavior Genetics* 30:85-94.
8. **Coleman, M. A., T. Garland, Jr., C. A. Marler, S. S. Newton, J. G. Swallow, and P. A. Carter.** 1998. Glucocorticoid response to forced exercise in laboratory house mice (*Mus domesticus*). *Physiology & Behavior* 63:279-285.
9. **Dumke, C. L., J. S. Rhodes, T. Garland, E. Maslowski, J. G. Swallow, A. C. Wetter, and G. D. Cartee.** 2001. Genetic selection of mice for high voluntary wheel-running: Effects on skeletal muscle glucose uptake. *Journal of Applied Physiology* 91:1289-1297.
10. **Houle-Leroy, P., T Garland, Jr., J. G. Swallow, and H. Guderley.** 2000. Effects of voluntary activity and genetic selection on muscle metabolic capacities in house mice, *Mus domesticus*. *Journal of Applied Physiology* 89:1608-1616.

11. **Isaacs, K. R., Anderson, B. J., Alcantara, A. A., Black, J. E., and Greenough, W. T.** (1992). Exercise and the brain: Angiogenesis in the adult rat cerebellum after vigorous physical activity and motor skill learning. *Journal of Cerebral Blood Flow & Metabolism*, 12, 110-119.
12. **Koteja, P., J. G. Swallow, P. A. Carter, and T. Garland, Jr.** 2001. Maximum cold-induced food consumption in mice selected for high locomotor activity: implications for the evolution of endotherm energy budgets. *The Journal of Experimental Biology* 204:1177-1190.
13. **Koteja, P., J. G. Swallow, P. A. Carter, and T. Garland, Jr.** 2000. Individual variation and repeatability of maximum cold-induced energy assimilation in house mice. *Acta Theriologica* 45:455-470.
14. **Koteja, P., J. G. Swallow, P. A. Carter, and T. Garland, Jr.** 1999. Energy cost of voluntary wheel running in laboratory house mice (*Mus domesticus*) selected for high activity. *Physiological and Biochemical Zoology* 72:238-249.
15. **Koteja, P., T. Garland, Jr., J. K. Sax, J. G. Swallow, and P. A. Carter.** 1999. Behavior of house mice artificially selected for high levels of voluntary wheel running. *Animal Behavior* 58:1307-1318.
16. **Krugner-Higby, L., A. Gedron, J. G. Swallow, T. Garland, Jr., P. A. Carter, and J. J. Lee.** 1998. Eosinophilic polymyositis in a mouse. *Contemporary Topics in Laboratory Animal Science* 37:94-97.
17. **McCloskey, D. P., Adamo, D. S., Anderson, B. J.** (2001). Exercise increases metabolic capacity in the motor cortex and striatum, but not in the hippocampus. *Brain Research*, 891, 168-175.
18. **Rhodes, J. S., P. Koteja, J. G. Swallow, P. A. Carter and T. Garland, Jr.** 2000. Body temperatures of house mice artificially selected for high voluntary wheel-running behavior: repeatability and effect of genetic selection. *Journal of Thermal Biology* 25:391-400.
19. **Swallow, J. G., P. A. Carter, and T. Garland, Jr.** 1998. Artificial selection for increased wheel-running behavior in house mice. *Behavior Genetics* 28:227-237.
20. **Swallow, J. G., T. Garland, Jr., P. Koteja, and P. A. Carter.** 2001. Food consumption and body composition in mice selected for high wheel running activity. *Journal of Comparative Physiology B (in press)*.

21. **Swallow, J. G., T. Garland, Jr., P. A. Carter, W.-Z. Zhan, and G. C. Sieck.** 1998. Effects of voluntary activity and genetic selection on aerobic capacity in house mice (*Mus domesticus*). *Journal of Applied Physiology* 84:69-76.
22. **Swallow, J. G., T. Garland, Jr., P. Koteja, and P. A. Carter.** 1999. Artificial selection for increased wheel-running activity in house mice results in decreased body mass at maturity. *The Journal of Experimental Biology* 202:2513-2520.
23. **Thomson, S.L., T. Garland, Jr., J.G. Swallow, and P.A. Carter.** 2001. Sod-2 enzyme activity in active and sedentary mice genetically selected for high-wheel running: implications for mechanisms of senescence. *The Journal of Heredity* (in press).
24. **Van Lunteren E. and Moyer M.** Wheel-Running Exercise Alters Rat Diaphragm Action Potentials and Their Regulation by K⁺ Channels. *Journal of Applied Physiology* 95: 602-610, 2003.
25. **Zhan, W.-Z, J. G. Swallow, T. Garland, Jr., D. N. Proctor, P. A. Carter, G. C. Sieck.** 1999. Effects of voluntary activity and genetic selection on the medial gastrocnemius muscle in house mice. *Journal of Applied Physiology* 87:2326-2333.