



Christine L Buckmaster

Senior research staff, Comparative Medicine

Professional

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Guest contributor, North American 3Rs Collaborative (NA3RsC) -- Refinement Initiative (2021 - 2023)
- Committee member, Primate Care Committee of the American Society of Primatologists (2022 - present)
- Member, American Society of Primatologists (2010 - present)

Publications

PUBLICATIONS

- **Five Hot Topics in Refinement of Nonhuman Primate Neuroscience Research** *Laboratory Animal Science Professional*
Buckmaster, C. L., Levesque, D., LaFollette, M., Loy, M., McMillan, J. L., Prescott, M. J., Thompson-Iritani, S.
2022
- **Long-term effects of intermittent early life stress on primate prefrontal-subcortical functional connectivity.** *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*
Yuan, R., Nechvatal, J. M., Buckmaster, C. L., Ayash, S., Parker, K. J., Schatzberg, A. F., Lyons, D. M., Menon, V.
2021
- **Multisensory modulation of body ownership in mice.** *Neuroscience of consciousness*
Buckmaster, C. L., Rathmann-Bloch, J. E., de Lecea, L. n., Schatzberg, A. F., Lyons, D. M.
2020; 2020 (1): niz019
- **Nonlinear relationship between early life stress exposure and subsequent resilience in monkeys.** *Scientific reports*
Parker, K. J., Buckmaster, C. L., Hyde, S. A., Schatzberg, A. F., Lyons, D. M.
2019; 9 (1): 16232
- **Cup tool use by squirrel monkeys** *AMERICAN JOURNAL OF PRIMATOLOGY*
Buckmaster, C. L., Hyde, S. A., Parker, K. J., Lyons, D. M.
2015; 77 (12): 1323-1332
- **Echocardiographic and Electrocardiographic Characteristics of Male and Female Squirrel Monkeys (Saimiri spp.).** *Journal of the American Association for Laboratory Animal Science*
Huss, M. K., Ikeno, F., Buckmaster, C. L., Albertelli, M. A.
2015; 54 (1): 25-28
- **A novel form of oxytocin in New World monkeys** *BIOLOGY LETTERS*
Lee, A. G., Cool, D. R., Grunwald, W. C., Neal, D. E., Buckmaster, C. L., Cheng, M. Y., Hyde, S. A., Lyons, D. M., Parker, K. J.
2011; 7 (4): 584-587
- **Early life stress and novelty seeking behavior in adolescent monkeys** *PSYCHONEUROENDOCRINOLOGY*
Parker, K. J., Rainwater, K. L., Buckmaster, C. L., Schatzberg, A. F., Lindley, S. E., Lyons, D. M.

2007; 32 (7): 785-792

- **Maternal mediation, stress inoculation, and the development of neuroendocrine stress resistance in primates** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Parker, K. J., Buckmaster, C. L., Sundlass, K., Schatzberg, A. F., Lyons, D. M.
2006; 103 (8): 3000-3005
- **Neural cell adhesion molecule peptide mimetics modulate emotionality: pharmacokinetic and behavioral studies in rats and non-human primates** *NEUROPSYCHOPHARMACOLOGY*
Turner, C. A., Lyons, D. M., Buckmaster, C. L., Aurbach, E. L., Watson, S. J., Schatzberg, A. F., Akil, H.
2019; 44 (2): 356–63
- **Learning to actively cope with stress in female mice.** *Psychoneuroendocrinology*
Lyons, D. M., Buckmaster, C. L., Schatzberg, A. F.
2018; 96: 78–83
- **Striatal dopamine D2/3 receptor regulation by stress inoculation in squirrel monkeys.** *Neurobiology of stress*
Lee, A. G., Nechvatal, J. M., Shen, B., Buckmaster, C. L., Levy, M. J., Chin, F. T., Schatzberg, A. F., Lyons, D. M.
2016; 3: 68-73
- **Learning to cope with stress modulates anterior cingulate cortex stargazin expression in monkeys and mice** *NEUROBIOLOGY OF LEARNING AND MEMORY*
Lee, A. G., Capanzana, R., Brockhurst, J., Cheng, M. Y., Buckmaster, C. L., Absher, D., Schatzberg, A. F., Lyons, D. M.
2016; 131: 95-100
- **Stress inoculation modeled in mice.** *Translational psychiatry*
Brockhurst, J., Cheleuitte-Nieves, C., Buckmaster, C. L., Schatzberg, A. F., Lyons, D. M.
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- **Coping and glucocorticoid receptor regulation by stress inoculation** *PSYCHONEUROENDOCRINOLOGY*
Lee, A. G., Buckmaster, C. L., Yi, E., Schatzberg, A. F., Lyons, D. M.
2014; 49: 272-279
- **Evaluation of s-1 receptor radioligand 18F-FTC-146 in rats and squirrel monkeys using PET.** *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*
James, M. L., Shen, B., Nielsen, C. H., Behera, D., Buckmaster, C. L., Mesangeau, C., Zavaleta, C., Vuppala, P. K., Jamalapuram, S., Avery, B. A., Lyons, D. M., McCurdy, C. R., Biswal, et al
2014; 55 (1): 147-153
- **Time-course of cerebrospinal fluid histamine in the wake-consolidated squirrel monkey** *JOURNAL OF SLEEP RESEARCH*
Zeitler, J. M., Kodama, T., Buckmaster, C. L., Honda, Y., Lyons, D. M., Nishino, S., Mignot, E.
2012; 21 (2): 189-194
- **Hypothalamic-pituitary-adrenal axis physiology and cognitive control of behavior in stress inoculated monkeys.** *International journal of behavioral development*
Parker, K. J., Buckmaster, C. L., Lindley, S. E., Schatzberg, A. F., Lyons, D. M.
2012; 36 (1)
- **Somatic and neuroendocrine responses to standard and biologically salient acoustic startle stimuli in monkeys** *PSYCHONEUROENDOCRINOLOGY*
Parker, K. J., Hyde, S. A., Buckmaster, C. L., Tanaka, S. M., Brewster, K. K., Schatzberg, A. F., Lyons, D. M., Woodward, S. H.
2011; 36 (4): 547-556
- **Stress coping stimulates hippocampal neurogenesis in adult monkeys** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Lyons, D. M., Buckmaster, P. S., Lee, A. G., Wu, C., Mitra, R., Duffey, L. M., Buckmaster, C. L., Her, S., Patel, P. D., Schatzberg, A. F.
2010; 107 (33): 14823-14827
- **Modafinil and gamma-hydroxybutyrate have sleep state-specific pharmacological actions on hypocretin-1 physiology in a primate model of human sleep** *BEHAVIOURAL PHARMACOLOGY*
Zeitler, J. M., Buckmaster, C. L., Landolt, H., Lyons, D. M., Mignot, E.

2009; 20 (7): 643-652

- **Prefrontal Plasticity and Stress Inoculation-Induced Resilience** *DEVELOPMENTAL NEUROSCIENCE*
Katz, M., Liu, C., Schaer, M., Parker, K. J., Ottet, M., Epps, A., Buckmaster, C. L., Bammer, R., Moseley, M. E., Schatzberg, A. F., Eliez, S., Lyons, D. M.
2009; 31 (4): 293-299
- **Preliminary evidence that hippocampal volumes in monkeys predict stress levels of adrenocorticotrophic hormone** *BIOLOGICAL PSYCHIATRY*
Lyons, D. M., Parker, K. J., Zeitzer, J. M., Buckmaster, C. L., Schatzberg, A. F.
2007; 62 (10): 1171-1174
- **Increasing length of wakefulness and modulation of hypocretin-1 in the wake-consolidated squirrel monkey** *AMERICAN JOURNAL OF PHYSIOLOGY-REGULATORY INTEGRATIVE AND COMPARATIVE PHYSIOLOGY*
Zeitzer, J. M., Buckmaster, C. L., Lyons, D. M., Mignot, E.
2007; 293 (4): R1736-R1742
- **Intranasal oxytocin administration attenuates the ACTH stress response in monkeys** *PSYCHONEUROENDOCRINOLOGY*
Parker, K. J., Buckmaster, C. L., Schatzberg, A. F., Lyons, D. M.
2005; 30 (9): 924-929
- **Mild early life stress enhances prefrontal-dependent response inhibition in monkeys** *BIOLOGICAL PSYCHIATRY*
Parker, K. J., Buckmaster, C. L., Justus, K. R., Schatzberg, A. F., Lyons, D. M.
2005; 57 (8): 848-855
- **Prospective investigation of stress inoculation in young monkeys** *ARCHIVES OF GENERAL PSYCHIATRY*
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- **Locomotor-dependent and -independent components to hypocretin-1 (orexinA) regulation in sleep-wake consolidating monkeys** *JOURNAL OF PHYSIOLOGY-LONDON*
Zeitzer, J. M., Buckmaster, C. L., Lyons, D. M., Mignot, E.
2004; 557 (3): 1045-1053
- **Circadian and homeostatic regulation of hypocretin in a primate model: Implications for the consolidation of wakefulness** *JOURNAL OF NEUROSCIENCE*
Zeitzer, J. M., Buckmaster, C. L., Parker, K. J., Hauck, C. M., Lyons, D. M., Mignot, E.
2003; 23 (8): 3555-3560

PRESENTATIONS

- PRELIMINARY OBSERVATIONS OF SOCIAL INTERACTIONS DURING SPONTANEOUS CUP TOOL USE BY CAPTIVE-BORN ADULT FEMALE SQUIRREL MONKEYS (SAIMIRI SCIUREUS) - American Society of Primatologists (June 18, 2015 - 6/20/2015)