

Stanford



Joseph Garner

Professor of Comparative Medicine and, by courtesy, of Psychiatry and Behavioral Sciences

Bio

BIO

Joseph Garner, D.Phil., Professor, received his doctoral degree from the Department of Zoology at the University of Oxford, Great Britain, where he studied the developmental neuroethology of stereotypies in captive animals (1995-1999). His postdoctoral research in animal behavior and wellbeing was undertaken at UC Davis (1999-2004). He served as an Assistant (2004-2010) and an Associate (2010-2011) Professor of animal behavior and wellbeing in the Department of Animal Sciences at Purdue University, where he also held a courtesy appointment in the Department of Speech, Language and Hearing Sciences (2009-2011). Dr. Garner joined the Department of Comparative Medicine at Stanford in 2011. Here he oversees 3R's services (Biostatistics consulting, Environmental enrichment & Behavioral management, Breeding colony management, Apparatus design & 3D printing) that help researchers implement new and emerging technologies, techniques and best practices in animal research that benefit both the wellbeing of research animals and the effectiveness, efficiency, reproducibility and translatability of the research.

The overarching theme of Dr. Garner's research is understanding why most drugs (and other basic science findings) fail to translate into human outcomes; the role that animal models, animal methodology, and animal wellbeing play in these failures; and developing new approaches to animal research which improve the translation and benefits of animal work through improvements in the wellbeing of animal participants. He is an internationally recognized expert in the behavior and wellbeing of laboratory mice, and abnormal behavior in animals in general, including awards from the National Center for the 3Rs (UK), the American Association for Laboratory Animal Science, the Swiss Laboratory Animal Science Association, and the Universities Federation for Animal Welfare. His current human health research is focused on animal and human studies in autism, trichotillomania, and compulsive skin-picking. The question driving all of this work is "Why does one sibling become ill and another does not?", and the goal is to identify biomarkers leading to screening, prevention and personalized treatment options. Recognition of his work in human health includes being selected for Spectrum's Ten Notable Papers in Autism Research for both 2017 and 2018. His publication record includes over 100 peer-reviewed journal articles, including papers in Science, PNAS, and Nature Methods.

Dr. Garner serves, or has served, as a council member for the International Society for Applied Ethology, an Editor for Applied Animal Behavior Science, a Special Topics section editor for the Journal of Animal Science, on the AAALAC Board of Trustees, on the SCAW Board of Trustees, on the NA3RsC board, on the Scientific Advisory Board of the Trichotillomania Learning Center, the Tourette Association of America, and the Beautiful You MRKH Foundation.

ACADEMIC APPOINTMENTS

- Professor - University Medical Line, Comparative Medicine
- Professor - University Medical Line (By courtesy), Psychiatry and Behavioral Sciences
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Faculty Fellow, Sarafan ChEM-H

- Member, Wu Tsai Neurosciences Institute

HONORS AND AWARDS

- Rigor & Reproducibility Award, Honorable Mention, Stanford University, Stanford Program on Research Rigor & Reproducibility (SPORR) (2023)
- Community Service Award, Stanford University, Department of Comparative Medicine (2022)
- Certificate of Distinction in Teaching, Stanford University, Department of Comparative Medicine (2019)
- Henry Spira Memorial Lecture, In Recognition of Innovation and Achievement in the 3Rs, PRIM&R (2016)
- Year of Learning, Great Teaching Showcase, Stanford University (2015)
- 3Rs Prize (Highly Commended), NC3Rs and GlaxoSmithKline (2014)
- Prize for exceptional science: for exceptional achievements in laboratory animal science, Swiss Society for Laboratory Animal Science (2013)
- Pravin N. Bhatt Young Investigator Award, American Association for Laboratory Animal Science (2012)
- Outstanding Faculty Mentor, Louis Stokes Alliance for Minority Participation - Indiana (2011)
- Early Achievement Award (Research), Poultry Science Association (2009)
- Entrepreneurial Leadership Academy Scholar, Purdue University (2009)
- Professor William Russell Fellowship, Universities Federation for Animal Welfare (2008-2011)
- Entrepreneurial Leadership Academy, Purdue University (2008)
- Professors For The Future Fellow, UC Davis (2001)
- Honorary Senior Scholar, New College, Oxford University (1995-1999)
- Gibbs Prize for Zoology, proxime accessit, Oxford University (1995)
- Southern Field Prize, Biological Sciences, Oxford University (1995)

COMMUNITY AND INTERNATIONAL WORK

- Board Member, North American 3Rs Collaborative
- Beautiful You MRKH Foundation
- Scientific Advisory Board, Tourette Syndrome Association
- Scientific Advisory Board, Trichotillomania Learning Center
- Member of editorial board, Applied Animal Behaviour Science
- Editorial Board, Journal of Animal Science
- Governing Council, International Society for Applied Ethology
- ISAE representative on the AAALAC Board of Trustees

LINKS

- Full publication list from Google Scholar: <http://scholar.google.com/citations?user=JThS8LMAAAAJ>
- Mouse ethogram and video library: <http://www.mousebehavior.org>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

I study the "science of doing science" and the connections between human and animal well-being – including both "forward translation" from animal work to human outcomes, but also "reverse translation" from human measures and interventions to animals. For example, roughly 90% of drugs fail in translation, and the majority of these failures are due to a lack of efficacy. The financial, societal, and ethical costs of these failures are staggering. Accordingly, the overarching theme of my research is understanding why most drugs (and other basic science findings) fail to translate into human outcomes, the role that animal models and animal methodology play

in these failures, and in developing new approaches to improve the translation of animal research while also improving well-being. I am particularly interested in biomarker-based personalized medicine as a general solution, and much of my research program focuses on developing methodologies for biomarker-based animal models (e.g. biostatistics; individual differences in risk and response; animal housing, behavior and well-being; reverse-translated assays and automated instrumentation).

On the animal well-being side of my research, my work on the role of biostatistics and experimental design in improving both animal well-being and scientific outcomes includes a series of papers in *Nature Methods*, as well as papers in the MRC (UK) and the National Academies' policy journals (*NC3Rs Journal*, and *ILAR journal*). We recently completed a long arc of work on the implementation and benefits (to science, well-being, and breeding) of nesting material for mice. Early papers in this program are referenced in new federal policy for mouse housing, and the body of work as a whole has won three major international awards. We are currently working on other major health and well-being issues in mice (particularly aggression and ulcerative dermatitis), including the first report of an effective treatment for ulcerative dermatitis. Our current NIH funding in this area is for the reverse-translation and validation of human measures of pain for use in mice, as a solution to the issues that current mouse measures of pain present for translational research.

I also work extensively in human health, both as a researcher and an advocate. My current human health research is focused on autism, trichotillomania and skin-picking. The question driving all of this work is "Why does one sibling become ill and another does not?", and the goal is to identify biomarkers leading to screening, prevention and personalized treatment options. My early work in autism reverse-translated neuropsychological biomarkers of frontal executive function for use in mice and other animals, and established spontaneous stereotypies as a model of stereotypies (identical repetitive movements) in autism. My current work in autism (in collaboration with colleagues at Stanford, UCSF and UC Davis) is focused on biomarkers, genetic risk factors, and associated potential therapeutics targeting oxytocin and vasopressin and the relationship to social deficits in autistic patients and primate models. Trichotillomania and Skin Picking Disorder are extremely prevalent (trichotillomania affects approximately 3.5% of women), underserved, and hidden disorders, with severe impacts on life functioning and potentially life-threatening medical complications. My lab is the only lab working on animal models for either disorder. In mice we have identified underlying disease processes, biomarkers predictive of later onset, preventative interventions, and most recently, a novel and highly effective treatment (intranasal glutathione).

Teaching

COURSES

2023-24

- Animal behavior: sex, death, and sometimes food!: COMPMED 80N (Aut, Spr)
- Robust, reproducible, real-world experimental design and analysis for life and biomedical scientists: COMPMED 211 (Aut)

2022-23

- Animal behavior: sex, death, and sometimes food!: COMPMED 80N (Aut, Spr)
- Robust, reproducible, real-world experimental design and analysis for life and biomedical scientists: COMPMED 211 (Aut)

2021-22

- Animal behavior: sex, death, and sometimes food!: COMPMED 80N (Aut, Spr)
- Robust, reproducible, real-world experimental design and analysis for life and biomedical scientists: COMPMED 211 (Aut)

2020-21

- Animal behavior: sex, death, and sometimes food!: COMPMED 80N (Aut, Spr)
- Biostatistics for the Life Sciences: COMPMED 211 (Aut)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Anna Ratuski

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Neurosciences (Phd Program)

Publications

PUBLICATIONS

- **Rhesus macaque social functioning is paternally, but not maternally, inherited by sons: potential implications for autism.** *Molecular autism*
Garner, J. P., Talbot, C. F., Del Rosso, L. A., McCowan, B., Kanthaswamy, S., Haig, D., Capitanio, J. P., Parker, K. J.
2023; 14 (1): 25
- **Oxytocin and the social facilitation of placebo effects.** *Molecular psychiatry*
Itskovich, E., Bowling, D. L., Garner, J. P., Parker, K. J.
2022
- **The epidemiology of fighting in group-housed laboratory mice.** *Scientific reports*
Theil, J. H., Ahloy-Dallaire, J., Weber, E. M., Gaskill, B. N., Pritchett-Corning, K. R., Felt, S. A., Garner, J. P.
2020; 10 (1): 16649
- **The Mouse in the Room: The Critical Distinction Between Regulations and Ethics** *Principles of Animal Research Ethics*
Garner, J. P.
OUP.2020: 79–98
- **Power to the People: Power, Negative Results and Sample Size** *JOURNAL OF THE AMERICAN ASSOCIATION FOR LABORATORY ANIMAL SCIENCE*
Gaskill, B. N., Garner, J. P.
2020; 59 (1): 9–16
- **A randomized placebo-controlled pilot trial shows that intranasal vasopressin improves social deficits in children with autism.** *Science translational medicine*
Parker, K. J., Oztan, O. n., Libove, R. A., Mohsin, N. n., Karhson, D. S., Sumiyoshi, R. D., Summers, J. E., Hinman, K. E., Motonaga, K. S., Phillips, J. M., Carson, D. S., Fung, L. K., Garner, et al
2019
- **Preventing, treating, and predicting barbering: A fundamental role for biomarkers of oxidative stress in a mouse model of Trichotillomania** *PLOS ONE*
Vieira, G. d., Lossie, A. C., Lay, D. C., Radcliffe, J. S., Garner, J. P.
2017; 12 (4)
- **Introducing Therioepistemology: the study of how knowledge is gained from animal research** *LAB ANIMAL*
Garner, J. P., Gaskill, B. N., Webers, E. M., Ahloy-Dallaire, J., Pritchett-Corning, K. R.
2017; 46 (4): 103-113
- **A "Pedi" Cures All: Toenail Trimming and the Treatment of Ulcerative Dermatitis in Mice.** *PloS one*
Adams, S. C., Garner, J. P., Felt, S. A., Geronimo, J. T., Chu, D. K.
2016; 11 (1): e0144871
- **Systematic variation improves reproducibility of animal experiments** *NATURE METHODS*
Richter, S. H., Garner, J. P., Auer, C., Kunert, J., Wuerbel, H.
2010; 7 (3): 167-168
- **Chronic Adaptations in the Dorsal Horn Following a Cervical Spinal Cord Injury in Primates.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*
Fisher, K. M., Garner, J. P., Darian-Smith, C.
2024; 44 (3)
- **A Cross-sectional Survey on Rodent Environmental Health Monitoring Practices: Benchmarking, Associations, and Barriers.** *Journal of the American Association for Laboratory Animal Science : JAALAS*
Luchins, K. R., Gates, K. V., Winn, C. B., Manuel, C. A., Pettan-Brewer, C., Foley, P. L., Peterson, N. C., Garner, J. P., Hanson, W., LaFollette, M. R.

2023; 62 (1): 64-73

- **Rhesus monkey sociality is stable across time and linked to variation in the initiation but not receipt of prosocial behavior.** *American journal of primatology*
Talbot, C. F., Madrid, J. E., Del Rosso, L. A., Capitanio, J. P., Garner, J. P., Parker, K. J.
2022: e23442
- **Small sensory spinal lesions that affect hand function in monkeys greatly alter primary afferent and motor neuron connections in the cord.** *The Journal of comparative neurology*
Fisher, K. M., Garner, J. P., Darian-Smith, C.
2022
- **Propofol Immersion as a Euthanasia Method for Adult Zebrafish (*Danio rerio*).** *Comparative medicine*
Davis, A. K., Garner, J. P., Chu, D. K., Felt, S. A.
2022
- **Autism-associated biomarkers: test-retest reliability and relationship to quantitative social trait variation in rhesus monkeys.** *Molecular autism*
Oztan, O., Talbot, C. F., Argilli, E., Maness, A. C., Simmons, S. M., Mohsin, N., Del Rosso, L. A., Garner, J. P., Sherr, E. H., Capitanio, J. P., Parker, K. J.
2021; 12 (1): 50
- **Assessment of medical morbidities in a rhesus monkey model of naturally occurring low sociality.** *Autism research : official journal of the International Society for Autism Research*
Myers, A. K., Talbot, C. F., Del Rosso, L. A., Maness, A. C., Simmons, S. M., Garner, J. P., Capitanio, J. P., Parker, K. J.
2021
- **Full closed loop open-source algorithm performance comparison in pigs with diabetes.** *Clinical and translational medicine*
Lal, R. A., Maikawa, C. L., Lewis, D., Baker, S. W., Smith, A. A., Roth, G. A., Gale, E. C., Stapleton, L. M., Mann, J. L., Yu, A. C., Correa, S., Grosskopf, A. K., Lioung, et al
2021; 11 (4): e387
- **Behavioral recovery after a spinal deafferentation injury in monkeys does not correlate with extent of corticospinal sprouting.** *Behavioural brain research*
Crowley, M., Lilak, A., Garner, J. P., Darian-Smith, C.
2021: 113533
- **Natural food intake patterns have little synchronizing effect on peripheral circadian clocks.** *BMC biology*
Xie, X., Kukino, A., Calzagno, H. E., Berman, A. M., Garner, J. P., Butler, M. P.
2020; 18 (1): 160
- **Complex Interplay Between Cognitive Ability and Social Motivation in Predicting Social Skill: A Unique Role for Social Motivation in Children With Autism.** *Autism research : official journal of the International Society for Autism Research*
Itskovich, E., Zyga, O., Libove, R. A., Phillips, J. M., Garner, J. P., Parker, K. J.
2020
- **Complex Interplay Between Cognitive Ability and Social Motivation in Predicting Social Skill: A Unique Role for Social Motivation in Children With Autism AUTISM RESEARCH**
Itskovich, E., Zyga, O., Libove, R. A., Phillips, J. M., Garner, J. P., Parker, K. J.
2020
- **ANIMAL MODELS OF TRICHOTILLOMANIA AND COMPULSIVE SKIN PICKING: A FOCUS ON THERIOEPISTEMOLOGY**
Garner, J. P.
ELSEVIER SCIENCE INC.2020: S327–S328
- **A psychometrically robust screening tool to rapidly identify socially impaired monkeys in the general population.** *Autism research : official journal of the International Society for Autism Research*
Talbot, C. F., Garner, J. P., Maness, A. C., McCowan, B., Capitanio, J. P., Parker, K. J.
2020
- **Reorganization of the Primate Dorsal Horn in Response to a Deafferentation Lesion Affecting Hand Function.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*
Fisher, K. M., Garner, J., Darian-Smith, C.
2020

- **Neonatal CSF vasopressin concentration predicts later medical record diagnoses of autism spectrum disorder.** *Proceedings of the National Academy of Sciences of the United States of America*
Oztan, O. n., Garner, J. P., Constantino, J. N., Parker, K. J.
2020
- **Tell-tale TINT: Does the Time to Incorporate into Nest Test Evaluate Postsurgical Pain or Welfare in Mice?** *JOURNAL OF THE AMERICAN ASSOCIATION FOR LABORATORY ANIMAL SCIENCE*
Gallo, M. S., Karas, A. Z., Pritchett-Corning, K., Garner, J. P., Mulder, G., Gaskil, B. N.
2020; 59 (1): 37–45
- **Automated monitoring of mouse feeding and body weight for continuous health assessment** *LABORATORY ANIMALS*
Ahloy-Dallaire, J., Klein, J. D., Davis, J. K., Garner, J. P.
2019; 53 (4): 342–51
- **Blood oxytocin concentration positively predicts contagious yawning behavior in children with autism spectrum disorder.** *Autism research : official journal of the International Society for Autism Research*
Mariscal, M. G., Oztan, O., Rose, S. M., Libove, R. A., Jackson, L. P., Sumiyoshi, R. D., Trujillo, T. H., Carson, D. S., Phillips, J. M., Garner, J. P., Hardan, A. Y., Parker, K. J.
2019
- **A randomized placebo-controlled pilot trial shows that intranasal vasopressin improves social deficits in children with autism** *SCIENCE TRANSLATIONAL MEDICINE*
Parker, K. J., Oztan, O., Libove, R. A., Mohsin, N., Karhson, D. S., Sumiyoshi, R. D., Summers, J. E., Hinman, K. E., Motonaga, K. S., Phillips, J. M., Carson, D. S., Fung, L. K., Garner, et al
2019; 11 (491)
- **The effect of early life experience, environment, and genetic factors on spontaneous home-cage aggression-related wounding in male C57BL/6 mice (vol 46, pg 176, 2017) LAB ANIMAL**
Gaskill, B. N., Stottler, A. M., Garner, J. P., Winnicker, C. W., Mulder, G. B., Pritchett-Corning, K. R.
2019; 48 (5): 147–48
- **Addendum: The effect of early life experience, environment, and genetic factors on spontaneous home-cage aggression-related wounding in male C57BL/6 mice. Lab animal**
Gaskill, B. N., Stottler, A. M., Garner, J. P., Winnicker, C. W., Mulder, G. B., Pritchett-Corning, K. R.
2019
- **Extensive somatosensory and motor corticospinal sprouting occurs following a central dorsal column lesion in monkeys** *JOURNAL OF COMPARATIVE NEUROLOGY*
Fisher, K. M., Lilak, A., Garner, J., Darian-Smith, C.
2018; 526 (15): 2373–87
- **Automated monitoring of mouse feeding and body weight for continuous health assessment.** *Laboratory animals*
Ahloy-Dallaire, J., Klein, J. D., Davis, J. K., Garner, J. P.
2018: 23677218797974
- **Cerebrospinal fluid vasopressin and symptom severity in children with autism** *ANNALS OF NEUROLOGY*
Oztan, O., Garner, J. P., Partap, S., Sherr, E. H., Hardan, A. Y., Farmer, C., Thurm, A., Swedo, S. E., Parker, K. J.
2018; 84 (4): 611–15
- **Cerebrospinal fluid vasopressin and symptom severity in children with autism.** *Annals of neurology*
Oztan, O., Garner, J. P., Partap, S., Sherr, E. H., Hardan, A. Y., Farmer, C., Thurm, A., Swedo, S. E., Parker, K. J.
2018
- **Extensive Somatosensory and Motor Corticospinal Sprouting Occurs Following a Central Dorsal Column Lesion in Monkeys.** *The Journal of comparative neurology*
Fisher, K. M., Lilak, A., Garner, J., Darian-Smith, C.
2018
- **Adaptive developmental plasticity in rhesus macaques: the serotonin transporter gene interacts with maternal care to affect juvenile social behaviour.** *Proceedings. Biological sciences*
Madrid, J. E., Mandalaywala, T. M., Coyne, S. P., Ahloy-Dallaire, J., Garner, J. P., Barr, C. S., Maestripieri, D., Parker, K. J.

2018; 285 (1881)

- **Adaptive developmental plasticity in rhesus macaques: the serotonin transporter gene interacts with maternal care to affect juvenile social behaviour** *PROCEEDINGS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*

Madrid, J. E., Mandalaywala, T. M., Coyne, S. P., Ahloy-Dallaire, J., Garner, J. P., Barr, C. S., Maestripieri, D., Parker, K. J.
2018; 285 (1881)

- **Arginine vasopressin in cerebrospinal fluid is a marker of sociality in nonhuman primates** *SCIENCE TRANSLATIONAL MEDICINE*

Parker, K. J., Garner, J. P., Oztan, O., Tarara, E. R., Li, J., Sclafani, V., Del Rosso, L. A., Chun, K., Berquist, S. W., Chez, M. G., Partap, S., Hardan, A. Y., Sherr, et al
2018; 10 (439)

- **Plasma anandamide concentrations are lower in children with autism spectrum disorder** *MOLECULAR AUTISM*

Karhson, D. S., Krasinska, K. M., Dallaire, J., Libove, R. A., Phillips, J. M., Chien, A. S., Garner, J. P., Hardan, A. Y., Parker, K. J.
2018; 9: 18

- **Breaking up is hard to do: does splitting cages of mice reduce aggression?** *Applied Animal Behaviour Science*

Blankenberger, W. B., Weber, E. M., Chu, D. K., Geronimo, J. T., Theil, J., Gaskill, B. N., Pritchett-Corning, K., Albertelli, M. A., Garner, J. P., Ahloy-Dallaire, J.
2018; 206: 94-101

- **Biomarker Discovery for Social Impairments: Translation From a Novel Monkey Model to Patients With Autism**

Parker, K., Garner, J., Oztan, O., Tarara, E., Li, J., Sclafani, V., Del Rosso, L., Chun, K., Berquist, S., Chez, M., Partap, S., Hardan, A., Sherr, et al
NATURE PUBLISHING GROUP.2017: S501–S502

- **Preference for novel faces in male infant monkeys predicts cerebrospinal fluid oxytocin concentrations later in life.** *Scientific reports*

Madrid, J. E., Oztan, O., Sclafani, V., Del Rosso, L. A., Calonder, L. A., Chun, K., Capitanio, J. P., Garner, J. P., Parker, K. J.
2017; 7 (1): 12935

- **Intranasal oxytocin treatment for social deficits and biomarkers of response in children with autism.** *Proceedings of the National Academy of Sciences of the United States of America*

Parker, K. J., Oztan, O., Libove, R. A., Sumiyoshi, R. D., Jackson, L. P., Karhson, D. S., Summers, J. E., Hinman, K. E., Motonaga, K. S., Phillips, J. M., Carson, D. S., Garner, J. P., Hardan, et al
2017; 114 (30): 8119-8124

- **Stressed out: providing laboratory animals with behavioral control to reduce the physiological effects of stress** *LAB ANIMAL*

Gaskill, B. N., Garner, J. P.
2017; 46 (4): 142-145

- **Aggression in group-housed laboratory mice: why can't we solve the problem?** *LAB ANIMAL*

Webers, E. M., Dallaire, J. A., Gaskill, B. N., Pritchett-Corning, K. R., Garner, J. P.
2017; 46 (4): 157-161

- **The effect of early life experience, environment, and genetic factors on spontaneous home-cage aggression-related wounding in male C57BL/6 mice** *LAB ANIMAL*

Gaskill, B. N., Stottler, A. M., Garner, J. P., Winnicker, C. W., Mulders, G. B., Pritchett-Corning, K. R.
2017; 46 (4): 176-184

- **The effect of early life experience, environment, and genetic factors on spontaneous home-cage aggression-related wounding in male C57BL/6 mice.** *Lab animal*

Gaskill, B. N., Stottler, A. M., Garner, J. P., Winnicker, C. W., Mulder, G. B., Pritchett-Corning, K. R.
2017; 46 (4): 176-184

- **Aggression in group-housed laboratory mice: why can't we solve the problem?** *Lab animal*

Weber, E. M., Dallaire, J. A., Gaskill, B. N., Pritchett-Corning, K. R., Garner, J. P.
2017; 46 (4): 157-161

- **Preference for novel faces in male infant monkeys predicts cerebrospinal fluid oxytocin concentrations later in life.** *Scientific Reports*

Madrid, J. E., Oztan, O., Sclafani, V., Del Rosso, L. A., Calonder, L. A., Chun, K., Capitanio, J. P., Garner, J. P., Parker, K. J.
2017: 12935

- **Intranasal oxytocin treatment for social deficits and biomarkers of response in children with autism.** *Proceedings of the National Academy of Sciences*

Parker, K. J., Oztan, O., Libove, R. A., Sumiyoshi, R. D., Jackson, L. P., Karhson, D. S., Summers, J. E., Hinman, K. E., Motonaga, K. S., Phillips, J. M., Carson, D. S., Garner, J. P., Hardan, et al
2017; 114 (30): 8119-8124

- **Biomarker discovery for disease status and symptom severity in children with autism.** *Psychoneuroendocrinology*
Oztan, O. n., Jackson, L. P., Libove, R. A., Sumiyoshi, R. D., Phillips, J. M., Garner, J. P., Hardan, A. Y., Parker, K. J.
2017; 89: 39-45

- **Intranasal Vasopressin Treatment Improves Social Abilities in Children With Autism**

Parker, K., Oztan, O., Libove, R., Sumiyoshi, R., Summers, J., Hinman, K., Fung, L., Motonaga, K., Carson, D., Phillips, J., Garner, J., Hardan, A.
NATURE PUBLISHING GROUP.2016: S341

- **He's getting under my skin! Comparing the sensitivity and specificity of dermal vs subcuticular lesions as a measure of aggression in mice** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

Gaskill, B. N., Stottler, A., Pritchett-Corning, K. R., Wong, L. K., Geronimo, J., Garner, J. P.
2016; 183: 77-85

- **Two of a Kind or a Full House? Reproductive Suppression and Alloparenting in Laboratory Mice** *PLOS ONE*

Garner, J. P., Gaskill, B. N., Pritchett-Corning, K. R.
2016; 11 (5)

- **A "Pedi" Cures All: Toenail Trimming and the Treatment of Ulcerative Dermatitis in Mice** *PLOS ONE*

Adams, S. C., Garner, J. P., Felt, S. A., Geronimo, J. T., Chu, D. K.
2016; 11 (1)

- **Early Predictors of Impaired Social Functioning in Male Rhesus Macaques (*Macaca mulatta*)**. *Plos one*

Sclafani, V., Del Rosso, L. A., Seil, S. K., Calonder, L. A., Madrid, J. E., Bone, K. J., Sherr, E. H., Garner, J. P., Capitanio, J. P., Parker, K. J.
2016; 11 (10)

- **Systematic Literature Review of Risk Factors and Treatments for Ulcerative Dermatitis in C57BL/6 Mice.** *Comparative medicine*

Chu, D. K., Adams, S. C., Felt, S. A., Geronimo, J. n., Garner, J. P.
2016; 66 (2): 89

- **SEROTONIN TRANSPORTER AND MATERNAL CARE: A SEX-SPECIFIC G X E EFFECT ON JUVENILE SOCIAL PLAY IN FREE-RANGING RHESUS MACAQUES OF CAYO SANTIAGO**

Madrid, J. E., Mandalaywala, T. M., Coyne, S. P., Garner, J. P., Barr, C. S., Maestripieri, D., Parker, K. J.
WILEY-BLACKWELL.2015: 107-8

- **Cerebrospinal fluid and plasma oxytocin concentrations are positively correlated and negatively predict anxiety in children** *MOLECULAR PSYCHIATRY*

Carson, D. S., Berquist, S. W., Trujillo, T. H., Garner, J. P., Hannah, S. L., Hyde, S. A., Sumiyoshi, R. D., Jackson, L. P., MOSS, J. K., Strehlow, M. C., Cheshier, S. H., Partap, S., Hardan, et al
2015; 20 (9): 1085-1090

- **Arginine Vasopressin Is a Blood-Based Biomarker of Social Functioning in Children with Autism** *PLOS ONE*

Carson, D. S., Garner, J. P., Hyde, S. A., Libove, R. A., Berquist, S. W., Hornbeak, K. B., Jackson, L. P., Sumiyoshi, R. D., Howerton, C. L., Hannah, S. L., Partap, S., Phillips, J. M., Hardan, et al
2015; 10 (7)

- **Antioxidant Therapies for Ulcerative Dermatitis: A Potential Model for Skin Picking Disorder** *PLOS ONE*

George, N. M., Whitaker, J., Vieira, G., Geronimo, J. T., Bellinger, D. A., Fletcher, C. A., Garner, J. P.
2015; 10 (7)

- **An initial investigation into the effects of isolation and enrichment on the welfare of laboratory pigs housed in the PigTurn (R) system, assessed using tear staining, behaviour, physiology and haematology** *ANIMAL WELFARE*

DeBoer, S. P., Garner, J. P., McCain, R. R., Lay, D. C., Eicher, S. D., Marchant-Forde, J. N.
2015; 24 (1): 15-27

- **Cerebrospinal fluid and plasma oxytocin concentrations are positively correlated and negatively predict anxiety in children.** *Molecular psychiatry*

Carson, D. S., Berquist, S. W., Trujillo, T. H., Garner, J. P., Hannah, S. L., Hyde, S. A., Sumiyoshi, R. D., Jackson, L. P., Moss, J. K., Strehlow, M. C., Cheshier, S. H., Partap, S., Hardan, et al
2014

- **Plasma vasopressin concentrations positively predict cerebrospinal fluid vasopressin concentrations in human neonates.** *Peptides*
Carson, D. S., Howerton, C. L., Garner, J. P., Hyde, S. A., Clark, C. L., Hardan, A. Y., Penn, A. A., Parker, K. J.
2014; 61: 12-16
- **Plasma vasopressin concentrations positively predict cerebrospinal fluid vasopressin concentrations in human neonates** *PEPTIDES*
Carson, D. S., Howerton, C. L., Garner, J. P., Hyde, S. A., Clark, C. L., Hardan, A. Y., Penn, A. A., Parker, K. J.
2014; 61: 12-16
- **The effect of perch availability during pullet rearing and egg laying on the behavior of caged White Leghorn hens** *POULTRY SCIENCE*
Hester, P. Y., Garner, J. P., Enneking, S. A., Cheng, H. W., Einstein, M. E.
2014; 93 (10): 2423-2431
- **Corticospinal Sprouting Differs According to Spinal Injury Location and Cortical Origin in Macaque Monkeys** *JOURNAL OF NEUROSCIENCE*
Darian-Smith, C., Lilak, A., Garner, J., Irvine, K.
2014; 34 (37): 12267-12279
- **Corticospinal sprouting differs according to spinal injury location and cortical origin in macaque monkeys.** *journal of neuroscience*
Darian-Smith, C., Lilak, A., Garner, J., Irvine, K.
2014; 34 (37): 12267-12279
- **Plasma oxytocin concentrations and OXTR polymorphisms predict social impairments in children with and without autism spectrum disorder** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Parker, K. J., Garner, J. P., Libove, R. A., Hyde, S. A., Hornbeak, K. B., Carson, D. S., Liao, C., Phillips, J. M., Hallmayer, J. F., Hardan, A. Y.
2014; 111 (33): 12258-12263
- **Letter-to-the-editor on "Not so hot: Optimal housing temperatures for mice to mimic the thermal environment of humans".** *Molecular metabolism*
Gaskill, B. N., Garner, J. P.
2014; 3 (4): 335-336
- **Plasma Vasopressin Levels Positively Predict Social Cognition in Children with Autism Spectrum Disorder but not in Siblings of Probands or Healthy Controls**
Carson, D. S., Howerton, C. L., Garner, J. P., Libove, R. A., Hyde, S. A., Phillips, J. M., Hardan, A. Y., Parker, K. J.
ELSEVIER SCIENCE INC.2014: 255S-256S
- **Plasma oxytocin concentrations are lower in depressed vs. healthy control women and are independent of cortisol.** *Journal of psychiatric research*
Yuen, K. W., Garner, J. P., Carson, D. S., Keller, J., Lembke, A., Hyde, S. A., Kenna, H. A., Tennakoon, L., Schatzberg, A. F., Parker, K. J.
2014; 51: 30-36
- **An automated maze task for assessing hippocampus-sensitive memory in mice** *BEHAVIOURAL BRAIN RESEARCH*
Pioli, E. Y., Gaskill, B. N., Gilmour, G., Tricklebank, M. D., Dix, S. L., Bannerman, D., Garner, J. P.
2014; 261: 249-257
- **The Significance of Meaning: Why Do Over 90% of Behavioral Neuroscience Results Fail to Translate to Humans, and What Can We Do to Fix It?** *ILAR JOURNAL*
Garner, J. P.
2014; 55 (3): 438-456
- **Nest Building as an Indicator of Health and Welfare in Laboratory Mice** *JOVE-JOURNAL OF VISUALIZED EXPERIMENTS*
Gaskill, B. N., Karas, A. Z., Garner, J. P., Pritchett-Corning, K. R.
2013
- **Can seeds help mice with the daily grind?** *LABORATORY ANIMALS*
Pritchett-Corning, K. R., Keefe, R., Garner, J. P., Gaskill, B. N.
2013; 47 (4): 312-315
- **The World is a Natural Laboratory, and Social Media is the New Petri Dish** *ETHOLOGY*
Rault, J., Elmore, M. R., Biehl, D. J., Russell, M. A., Garner, J. P.
2013; 119 (10): 803-806
- **Prenatal stress puzzle, the oxytocin piece: Prenatal stress alters the behaviour and autonomic regulation in piglets, insights from oxytocin** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

- Rault, J., Mack, L. A., Carter, C. S., Garner, J. P., Marchant-Forde, J. N., Richert, B. T., Lay, D. C.
2013; 148 (1-2): 99-107
- **Winning the Genetic Lottery: Biasing Birth Sex Ratio Results in More Grandchildren** *PLOS ONE*
Thogerson, C. M., Brady, C. M., Howard, R. D., Mason, G. J., Pajor, E. A., Vicino, G. A., Garner, J. P.
2013; 8 (7)
 - **Reply to: "Reanalysis of Richter et al. (2010) on reproducibility".** *Nature methods*
Würbel, H., Richter, S. H., Garner, J. P.
2013; 10 (5): 374-?
 - **Repeated intranasal oxytocin administration in early life dysregulates the HPA axis and alters social behavior.** *Physiology & behavior*
Rault, J., Carter, C. S., Garner, J. P., Marchant-Forde, J. N., Richert, B. T., Lay, D. C.
2013; 112-113: 40-48
 - **Repeated intranasal oxytocin administration in early life dysregulates the HPA axis and alters social behavior** *PHYSIOLOGY & BEHAVIOR*
Rault, J., Carter, C. S., Garner, J. P., Marchant-Forde, J. N., Richert, B. T., Lay, D. C.
2013; 112: 40-48
 - **Impact of nesting material on mouse body temperature and physiology.** *Physiology & behavior*
Gaskill, B. N., Gordon, C. J., Pajor, E. A., Lucas, J. R., Davis, J. K., Garner, J. P.
2013; 110-111: 87-95
 - **Impact of nesting material on mouse body temperature and physiology** *PHYSIOLOGY & BEHAVIOR*
Gaskill, B. N., Gordon, C. J., Pajor, E. A., Lucas, J. R., Davis, J. K., Garner, J. P.
2013; 110: 87-95
 - **Does the presence of a human affect the preference of enrichment items in young, isolated pigs?** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
DeBoer, S. P., Garner, J. P., Lay, D. C., Eicher, S. D., Lucas, J. R., Marchant-Forde, J. N.
2013; 143 (2-4): 96-103
 - **Biology, behavior, and environmental enrichment for the captive African clawed frog (*Xenopus spp*)** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Chum, H., Felt, S., Garner, J., Green, S.
2013; 143 (2-4): 150-156
 - **Nest building as an indicator of health and welfare in laboratory mice.** *Journal of visualized experiments : JoVE*
Gaskill, B. N., Karas, A. Z., Garner, J. P., Pritchett-Corning, K. R.
2013; 51012-?
 - **Energy Reallocation to Breeding Performance through Improved Nest Building in Laboratory Mice.** *PloS one*
Gaskill, B. N., Pritchett-Corning, K. R., Gordon, C. J., Pajor, E. A., Lucas, J. R., Davis, J. K., Garner, J. P.
2013; 8 (9)
 - **The naked truth: Breeding performance in nude mice with and without nesting material** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Gaskill, B. N., Winnicker, C., Garner, J. P., Pritchett-Corning, K. R.
2013; 143 (2-4): 110-116
 - **ENU mutagenesis reveals that Notchless homolog 1 (*Drosophila*) affects Cdkn1a and several members of the Wnt pathway during murine pre-implantation development** *BMC GENETICS*
Lossie, A. C., Lo, C., Baumgarner, K. M., Cramer, M. J., Garner, J. P., Justice, M. J.
2012; 13
 - **Differing results for motivation tests and measures of resource use: The value of environmental enrichment to gestating sows housed in stalls** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Elmore, M. R., Garner, J. P., Johnson, A. K., Kirkden, R. D., Patterson-Kane, E. G., Richert, B. T., Pajor, E. A.
2012; 141 (1-2): 9-19
 - **A standardized cage measurement system: A versatile tool for calculating usable cage space** *JOURNAL OF APPLIED POULTRY RESEARCH*
Kiess, A. S., Hester, P. Y., Mench, J. A., Newberry, R. C., Garner, J. P.
2012; 21 (3): 657-668

- **A system utilizing radio frequency identification (RFID) technology to monitor individual rodent behavior in complex social settings** *JOURNAL OF NEUROSCIENCE METHODS*
Howerton, C. L., Garner, J. P., Mench, J. A.
2012; 209 (1): 74-78
- **The effect of cage and house design on egg production and egg weight of White Leghorn hens: An epidemiological study** *POULTRY SCIENCE*
Garner, J. P., Kiess, A. S., Mench, J. A., Newberry, R. C., Hester, P. Y.
2012; 91 (7): 1522-1535
- **Heat or Insulation: Behavioral Titration of Mouse Preference for Warmth or Access to a Nest** *PLOS ONE*
Gaskill, B. N., Gordon, C. J., Pajor, E. A., Lucas, J. R., Davis, J. K., Garner, J. P.
2012; 7 (3)
- **If You Knew What Was Good For You! The Value of Environmental Enrichments With Known Welfare Benefits Is Not Demonstrated by Sows Using Operant Techniques** *JOURNAL OF APPLIED ANIMAL WELFARE SCIENCE*
Elmore, M. R., Garner, J. P., Johnson, A. K., Kirkden, R. D., Richert, B. T., Pajor, E. A.
2012; 15 (3): 254-271
- **The Possibilities and Limitations of Animal Models for Psychiatric Disorders** *DRUG DISCOVERY FOR PSYCHIATRIC DISORDERS*
Tricklebank, M. D., Garner, J. P., Rankovic, Z., Hargreaves, R., Bingham, M.
2012; 28: 534-57
- **Retained Fetal Membranes in C57BL/6NCrl Mice: Description of Clinical Case Presentations and Related Epidemiologic Findings** *COMPARATIVE MEDICINE*
Johnson, J. K., Vemulapalli, T. H., Van Alstine, W. G., Roberts, C. S., Garner, J. P., Hickman, D. L.
2011; 61 (6): 505-509
- **Recurrent perseveration correlates with abnormal repetitive locomotion in adult mink but is not reduced by environmental enrichment** *BEHAVIOURAL BRAIN RESEARCH*
Dallaire, J. A., Meagher, R. K., Diez-Leon, M., Garner, J. P., Mason, G. J.
2011; 224 (2): 213-222
- **Getting around social status: Motivation and enrichment use of dominant and subordinate sows in a group setting** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Elmore, M. R., Garner, J. P., Johnson, A. K., Kirkden, R. D., Richert, B. T., Pajor, E. A.
2011; 133 (3-4): 154-163
- **Reverse-translational biomarker validation of Abnormal Repetitive Behaviors in mice: An illustration of the 4P's modeling approach** *BEHAVIOURAL BRAIN RESEARCH*
Garner, J. P., Thogerson, C. M., Dufour, B. D., Wuerbel, H., Murray, J. D., Mench, J. A.
2011; 219 (2): 189-196
- **Working with what you've got: Changes in thermal preference and behavior in mice with or without nesting material** *JOURNAL OF THERMAL BIOLOGY*
Gaskill, B. N., Rohr, S. A., Pajor, E. A., Lucas, J. R., Garner, J. P.
2011; 36 (3): 193-199
- **Little and often? Maintaining continued performance in an automated T-maze for mice** *BEHAVIOURAL PROCESSES*
Gaskill, B. N., Lucas, J. R., Pajor, E. A., Garner, J. P.
2011; 86 (2): 272-278
- **Effect of Population Heterogenization on the Reproducibility of Mouse Behavior: A Multi-Laboratory Study** *PLOS ONE*
Richter, S. H., Garner, J. P., Zipser, B., Lewejohann, L., Sachser, N., Touma, C., Schindler, B., Chourbaji, S., Brandwein, C., Gass, P., van Stipdonk, N., van der Harst, J., Spruijt, et al
2011; 6 (1)
- **Cage-induced stereotypies in female ICR CD-1 mice do not correlate with recurrent perseveration** *BEHAVIOURAL BRAIN RESEARCH*
Gross, A. N., Engel, A. K., Richter, S. H., Garner, J. P., Wuerbel, H.
2011; 216 (2): 613-620
- **Working with what you've got: Changes in thermal preference and behavior in mice with or without nesting material** *Journal of Thermal Biology*
Gaskill BN, Rohr SA, Pajor EA, Lucas JR, Garner JP

2011; 36 (3): 193-199

● **Nutritional up-regulation of serotonin paradoxically induces compulsive behavior** *NUTRITIONAL NEUROSCIENCE*

Dufour, B. D., Adeola, O., Cheng, H., Donkin, S. S., Klein, J. D., Pajor, E. A., Garner, J. P.
2010; 13 (6): 256-264

● **Aggressiveness and brain amine concentration in dominant and subordinate finishing pigs fed the beta-adrenoreceptor agonist ractopamine** *JOURNAL OF ANIMAL SCIENCE*

Poletto, R., Cheng, H. W., Meisel, R. L., Garner, J. P., Richert, B. T., Marchant-Forde, J. N.
2010; 88 (9): 3107-3120

● **A flooring comparison: The impact of rubber mats on the health, behavior, and welfare of group-housed sows at breeding** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

Elmore, M. R., Garner, J. P., Johnson, A. K., Richert, B. T., Pajor, E. A.
2010; 123 (1-2): 7-15

● **A flooring comparison: The impact of rubber mats on the health, behavior, and welfare of group-housed sows at breeding** *Applied Animal Behaviour Science*

Elmore MRP, Garner JP, Johnson AK
2010; 123 (1-2): 7-15

● **The effect of feeder space allocation on productivity and physiology of Hy-Line W-36 hens housed in conventional cages** *POULTRY SCIENCE*

Thogerson, C. M., Hester, P. Y., Mench, J. A., Newberry, R. C., Okura, C. M., Pajor, E. A., Talaty, P. N., Garner, J. P.
2009; 88 (9)

● **The effect of feeder space allocation on behavior of Hy-Line W-36 hens housed in conventional cages** *POULTRY SCIENCE*

Thogerson, C. M., Hester, P. Y., Mench, J. A., Newberry, R. C., Pajor, E. A., Garner, J. P.
2009; 88 (8): 1544-1552

● **Thermonociception in fish: Effects of two different doses of morphine on thermal threshold and post-test behaviour in goldfish (*Carassius auratus*)** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

Nordgreen, J., Garner, J. P., Janczak, A. M., Ranheim, B., Muir, W. M., Horsberg, T. E.
2009; 119 (1-2): 101-107

● **Environmental standardization: cure or cause of poor reproducibility in animal experiments?** *NATURE METHODS*

Richter, S. H., Garner, J. P., Wuerbel, H.
2009; 6 (4): 257-261

● **Some like it hot: Mouse temperature preferences in laboratory housing** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

Gaskill, B. N., Rohr, S. A., Pajor, E. A., Lucas, J. R., Garner, J. P.
2009; 116 (2-4): 279-285

● **Thermonociception in fish: Effects of two different doses of morphine on thermal threshold and post-test behaviour in goldfish (*Carassius auratus*)** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

Nordgreen J, Garner JP, Janczak Am, Ranheim B, Muir WM, Horsberg TE
2009; 119 (1-2): 101-107

● **Some like it hot: Mouse temperature preferences in laboratory housing** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

Gaskill BN, Rohr SA, Pajor EA, Lucas JR, Garner JP
2009; 116 (2-4): 279-285

● **Impact of Nesting Material on Mouse Thermoregulation and Variability** *JOURNAL OF THE AMERICAN ASSOCIATION FOR LABORATORY ANIMAL SCIENCE*

Gaskill BN, Gordon CJ, Pajor EA, Garner JP
2009; 48 (5): 549-549

● **Preferences of Orange-winged Amazon parrots (*Amazona amazonica*) for cage enrichment devices** *Applied Animal Behaviour Science*

Kim LC, Garner JP, Millam JR
2009; 120 (3-4): 216-223

● **Effects of a running wheel-igloo enrichment on aggression, hierarchy linearity, and stereotypy in group-housed male CD-1 (ICR) mice** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

- Howerton, C. L., Garner, J. P., Mench, J. A.
2008; 115 (1-2): 90-103
- **Home Improvement: C57BL/6J Mice Given More Naturalistic Nesting Materials Build Better Nests** *JOURNAL OF THE AMERICAN ASSOCIATION FOR LABORATORY ANIMAL SCIENCE*
Hess, S. E., Rohr, S., Dufour, B. D., Gaskill, B. N., Pajor, E. A., Garner, J. P.
2008; 47 (6): 25-31
 - **A note on the effects of co-mingling piglet litters on pre-weaning growth, injuries and responses to behavioural tests** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Kanaan, V. T., Pajor, E. A., Lay, D. C., Richert, B. T., Garner, J. P.
2008; 110 (3-4): 386-391
 - **A note on the effects of co-mingling piglet litters on pre-weaning growth, injuries and responses to behavioural tests** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Kanaan VT, Pajor EA, Lay DC, Richter BT, Garner JP
2008; 110 (3-4): 386-391
 - **Effects of a running wheel-igloo enrichment on aggression, hierarchy linearity, and stereotypy in group-housed male CD-1 (ICR) mice** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Howerton CL, Garner JP, Mench JA
2008; 115 (1-2): 90-103
 - **The effects of different bill-trimming methods on the well-being of pekin ducks** *POULTRY SCIENCE*
Gustafson, L. A., Cheng, H., Garner, J. P., Pajor, E. A., Mench, J. A.
2007; 86 (9): 1831-1839
 - **Trichotillomania, stereotypic movement disorder, and related disorders.** *Current psychiatry reports*
Stein, D. J., Garner, J. P., Keuthen, N. J., Franklin, M. E., Walkup, J. T., Woods, D. W.
2007; 9 (4): 301-302
 - **Effects of bill-trimming Muscovy ducks on behavior, body weight gain, and bill morphopathology** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Gustafson, L. A., Cheng, H., Garner, J. P., Pajor, E. A., Mench, J. A.
2007; 103 (1-2): 59-74
 - **Effects of bill-trimming Muscovy ducks on behavior, body weight gain, and bill morphopathology** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Gustafson LA, Cheng HW, Garner JP, Pajor EA, Mench JA
2007; 103 (1-2): 59-74
 - **Refinement of rodent research through environmental enrichment and systematic randomization** *NC3Rs*
WRBEL H, GARNER JP
2007; 9: 1-9
 - **Animal neuropsychology: Validation of the Intra-Dimensional Extra-Dimensional set shifting task for mice** *BEHAVIOURAL BRAIN RESEARCH*
Garner, J. P., Thogerson, C. M., Wuerbel, H., Murray, J. D., Mench, J. A.
2006; 173 (1): 53-61
 - **Is fearfulness a trait that can be measured with behavioural tests? A validation of four fear tests for Japanese quail** *ANIMAL BEHAVIOUR*
Miller, K. A., Garner, J. P., Mench, J. A.
2006; 71: 1323-1334
 - **Genetic, environmental, and neighbor effects on the severity of stereotypies and feather picking in Orange-winged Amazon parrots (*Amazona amazonica*): An epidemiological study** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Garner JP, Meehan CI, Famula TR
2006; 96
 - **Genetic, environmental, and neighbor effects on the severity of stereotypies and feather picking in Orange-winged Amazon parrots (*Amazona amazonica*): An epidemiological study** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Garner, J. P., Meehan, C. L., Famula, T. R., Mench, J. A.
2006; 96 (1-2): 153-168

- **Genetic, environmental, and neighbor effects on the severity of stereotypies and feather picking in Orange-winged Amazon parrots (*Amazona amazonica*): An epidemiological study** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Garner JR, Meehan CL, Famula TR, Mench JA
2006; 96 (1-2): 153-168
- **Is fearfulness a trait that can be measured with behavioural tests? A validation of four fear tests for Japanese quail** *ANIMAL BEHAVIOUR*
Miller KA, Garner JP, Mench JA
2006; 71 (6): 1323-1334
- **Effect of sand and wood-shavings bedding on the behavior of broiler chickens** *POULTRY SCIENCE*
Shields, S. J., Garner, J. P., Mench, J. A.
2005; 84 (12): 1816-1824
- **The test-retest reliability of four behavioural tests of fearfulness for quail: a critical evaluation** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Miller, K. A., Garner, J. P., Mench, J. A.
2005; 92 (1-2): 113-127
- **The test-retest reliability of four behavioural tests of fearfulness for quail: a critical evaluation** *Applied Animal Behaviour Science*
Miller KA, Garner JP, Mench JA
2005; 92 (1-2): 113-127
- **Stereotypies and other abnormal repetitive behaviors: Potential impact on validity, reliability, and replicability of scientific outcomes** *ILAR JOURNAL*
Garner, J. P.
2005; 46 (2): 106-117
- **Social and husbandry factors affecting the prevalence and severity of barbing ('whisker trimming') by laboratory mice** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Garner, J. P., Dufour, B., Gregg, L. E., Weisker, S. M., Mench, J. A.
2004; 89 (3-4): 263-282
- **Dustbathing by broiler chickens: a comparison of preference for four different substrates** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Shields, S. J., Garner, J. P., Mench, J. A.
2004; 87 (1-2): 69-82
- **Environmental enrichment and development of cage stereotypy in Orange-winged Amazon parrots (*Amazona amazonica*)** *DEVELOPMENTAL PSYCHOBIOLOGY*
Meehan, C. L., Garner, J. P., Mench, J. A.
2004; 44 (4): 209-218
- **Barbing (Fur and whisker trimming) by laboratory mice as a model of human trichotillomania and obsessive-compulsive spectrum disorders** *COMPARATIVE MEDICINE*
Garner, J. P., Weisker, S. M., Dufour, B., Mench, J. A.
2004; 54 (2): 216-224
- **A behavioral comparison of New Zealand White rabbits (*Oryctolagus cuniculus*) housed individually or in pairs in conventional laboratory cages** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Chu, L. R., Garner, J. P., Mench, J. A.
2004; 85 (1-2): 121-139
- **Social and husbandry factors affecting the prevalence and severity of barbing ('whisker trimming') by laboratory mice** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Garner JP, Dufour B, Gregg LE, Weisker SM, Mench JA
2004; 89 (3-4): 263-282
- **Dustbathing by broiler chickens: a comparison of preference for four different substrates** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Shields SJ, Garner JP, Mench JA
2004; 87 (1-2): 69-82
- **A behavioral comparison of New Zealand White rabbits (*Oryctolagus cuniculus*) housed individually or in pairs in conventional laboratory cages** *APPLIED ANIMAL BEHAVIOUR SCIENCE*
Chu LR, Garner JP, Mench JA

2004; 85 (1-2): 121-139

● **Stereotypies in caged parrots, schizophrenia and autism: evidence for a common mechanism** *BEHAVIOURAL BRAIN RESEARCH*

Garner, J. P., Meehan, C. L., Mench, J. A.
2003; 145 (1-2): 125-134

● **Stereotypic route-tracing in experimentally caged songbirds correlates with general behavioural disinhibition** *ANIMAL BEHAVIOUR*

Garner, J. P., Mason, G. J., Smith, R.
2003; 66: 711-727

● **Isosexual pair housing improves the welfare of young Amazon parrots** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

Meehan, C. L., Garner, J. P., Mench, J. A.
2003; 81 (1): 73-88

● **Stereotypic route-tracing in experimentally caged songbirds correlates with general behavioural disinhibition** *ANIMAL BEHAVIOUR*

Garner JP, Meehan CL, Mench JA
2003; 66: 711-727

● **Isosexual pair housing improves the welfare of young Amazon parrots** *APPLIED ANIMAL BEHAVIOUR SCIENCE*

Meehan CL, Garner JP, Mench JA
2003; 81 (1): 73-88

● **Evidence for a relationship between cage stereotypies and behavioural disinhibition in laboratory rodents** *BEHAVIOURAL BRAIN RESEARCH*

Garner, J. P., Mason, G. J.
2002; 136 (1): 83-92

● **Reliability and validity of a modified gait scoring system and its use in assessing tibial dyschondroplasia in broilers** *BRITISH POULTRY SCIENCE*

Garner, J. P., Falcone, C., Wakenell, P., Martin, M., Mench, J. A.
2002; 43 (3): 355-363

● **Adult attachment and the defensive regulation of attention and memory: Examining the role of preemptive and postemptive defensive processes** *107th Annual Convention of the American-Psychological-Association*

Fraley, R. C., Garner, J. P., Shaver, P. R.
AMER PSYCHOLOGICAL ASSOC.2000: 816-26

● **Arable habitat use by wood mice (*Apodemus sylvaticus*). 3. A farm-scale experiment on the effects of crop rotation** *JOURNAL OF ZOOLOGY*

MacDonald DW, Tew TE, Todd IA, Garner JP, Johnson PJ
2000; 250: 313-320

● **On the origins of birds: the sequence of character acquisition in the evolution of avian flight** *PROCEEDINGS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*

Garner, J. P., Taylor, G. K., Thomas, A. L.
1999; 266 (1425): 1259-1266

● **On the origins of birds: the sequence of character acquisition in the evolution of avian flight** *PROCEEDINGS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*

Garner JP, Taylor GK, Thomas ALR
1999; 266 (1425): 1259-1266

● **Are birds dinosaurs?** *TRENDS IN ECOLOGY & EVOLUTION*

Thomas, A. L., Garner, J. P.
1998; 13 (4): 129-130

● **Assesing animal priorities: future directions** *Animal Behaviour*

Mason G, Garner JP, McFarland D
1998; 55: 1082-1083

● **A demanding task: using economic techniques to assess animal priorities** *ANIMAL BEHAVIOUR*

Mason G, McFarland D, Garner JP
1998; 55: 1071-1075

- **Counting the Fingers of Birds and Dinosaurs** *Science*
Garner JP, Thomas ALR
1998; 280 (5362)