CURRICULUM VITAE

Jessica Lynn Owens, Ph. D.

Experimental Psychologist, Professor, Animal Behavior Specialist Social Behavior • Research Design • Behavior Analyst

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Professional Profile

• Experience • 20 years of high performance in diverse professional settings: academic, curriculum, mentoring, research, training, and business management.

• Expertise • Analysis of social and vocal behavior and research design.

• **Research** • A 15 year history of multi-disciplinary experimental research, conference participation, and publication recognized, awarded, and funded by professional and academic organizations.

• Academia • Assistant professor teaching cross-disciplinary coursework, proven committee member and leader during accreditation, and active mentor and advisor.

• **Technical** • Sound Analysis Software (Cool Edit Pro, Avisoft SASLab Pro, Raven), Statistical / Spreadsheet Software (SPSS, SAS, JUMP, Excel), Word Processing (Microsoft Office), SMART technology, Moodle, Online teaching, Blackboard, Social Networking, Crowdfunding & Crowdsourcing.

Education

2005, B.A. Psychology

Mount Union College

• "The Effect of an Enriched Environment on Behavior and Anatomy Following Medial Frontal Cortex Contusions."

• Used behavioral neuroscience approach to investigate potential of social and physical enrichment as treatment for physiological and behavioral deficits resulting from a common neurotrauma.

• GPA= 3.4 of a maximum 4.0, 130 semester hours earned

2013, Ph.D. Experimental Psychology

• "Effects of Traffic Noise on the Social Behavior of Tufted Titmice."

• Used conservation behavior approach to determine how traffic noise, common form of anthropogenic disturbance, affects avian behavior while testing hypotheses for causal mechanisms.

• *GPA* = 3.95 *of a maximum* 4.0

University of Tennessee

Academic Appointments

08/2017 - 05/2018

Montana State University, MT

Courses: Psychology 491, Comparative Psychology (Online)

08/2014 – 12/2015, Asst. Professor (Tenure Track)

Union College, KY

Courses: Psychology 200, Introduction to Psychology Psychology 210, Child Development Psychology 225, Adolescent Psychology Psychology 470 & 570, Learning Theory (570, Graduate) Psychology 592, Social & Community Psychology (Online, Graduate) General Studies 181, Critical Thinking

Committees: Re-Accreditation Quality Enhancement Program (RQEP) Steering Committee Gen. Studies Critical Thinking 181 Course Design Committee RQEP Co-Curricular Committee (Director)

Achievements 2014-2015: Union College Research Fellowship, meditation club, revival of Psychology Club with record-setting membership and community service hours, 12% increase in Psychology enrollment, symposium presenter at Behaviour 2015 (International conference), two invited talks, outreach presentation at Evarts Elementary School, successful completion of crowdfunding project, several interviews for Canid Howl Project.

Courses: Psychology 100, Introduction to Psychology Psychology 221, Child Development Psychology 290, Human Learning & Thinking Psychology 390, Physiological Psychology

Committees: Research & Scholarship Committee Graduate Programs Committee Undergraduate Admissions Committee

Achievements: cofounder of Symposium at 15th meeting of the International Society for Behavioral Ecology, established collaborations with University of Michigan and National Institutes of Math and Biological Sciences, publication of a collaborative manuscript, cofounder and participant in Research and Scholarship Colloquium, cofounder Grant Review Panel, revival of Psychology Club with record-setting membership and community service hours, 10% increase in Psychology enrollment, Psychology Curriculum, Faculty Podcast.

08/2006 - 05/2013, Graduate Teaching Asst.

University of Tennessee

Courses: Psychology 310, Motivation Psychology 320, Learning & Thinking Psychology 400, Cognition: Symbol & Language Processing Psychology 474, Theories in Research & Child Development (Grad mixed)

Research Positions

08/2013 - Current, Researcher / Secretary

Duties: The Cooperative Predator Vocalization Consortium (CPVC) is an international group of scientists that works individually and collaboratively to investigate the vocal, social, and predatory behavior of these species that hunt in packs, using recordings, playbacks, mathematical algorithms, and other techniques.

05/2007 - 08/2007, Graduate Research Intern Mote Marine Laboratory, FL

Duties: Data collection and analysis for several projects including prey ecology, adolescent male bottlenose dolphin social behavior, fish communication.

08/2005 - 07/2006, Graduate Research Assistant University of Tennessee

Duties: Assist with design, data collection and analysis of research projects comparing social and vocal complexity between species.

06/2004 - 09/2004, NSF Research Fellow Kent State University, OH

Duties: Collaborate with Dr. Stephen Fountain and his students to design an experiment, collect and then analyze data for a study of complex pattern learning behavior.

Peer-Reviewed Publications

- Smith, B., Root-Gutteridge, H., Butkiewicz, H., Dassow, A., Fontaine, A., Markham, A., Owens, J.L., Schindler, L., Wijers, M., Kershenbaum, A. (2021). Acoustic localization of wildlife with low-cost equipment: lower sensitivity, but no loss of precision. *Wildlife Research*.
- Kershenbaum, A., **Owens, J.L.**, & Waller, S. (2019). Tracking cryptic animals using acoustic multilateration: a system for long-range wolf detection. *Journal of the Acoustical Society of America*, 145, 1619-1628.
- Owens, J.L., Waller, S, Olsen, M., Fontaine, A., & Kloth, C. (2017). Visual classification of feral cat *Feral silvestris catus* vocalizations. *Current Zoology* 63(6), 331-339. doi:10.1093/cz/zox013
- Avey, M.T, Bloomfield, L.L., Elie, J.E., Freeberg, T.M., Guillette, L.M., Hoeschele, M., Lee, H., Moscicki, M.K., Owens, J.L. & Sturdy, C.B. (2014). ZENK activation in the nidopallium of black-capped chickadees in response to both conspecific and heterospecific calls. *PLoS ONE* 9(6), e100927. doi:10.1371/journal.pone.0100927.
- **Owens, J.L.**, Stec, C.L. & O'Hatnick, A. (2012). The effects of extended exposure to traffic noise on Parid social and risk-taking behavior. *Behavioral Processes*, 91(1), 61-69.
- Bartmess, J., Branch, C.L., Browning, S., **Owens, J.L.**, & Freeberg, T.M. (2010). Vocal signaling in the context of a perched predator model: a comparative study with Carolina chickadees (*Poecile carolinensis*), tufted titmice (*Baeolophus bicolor*), and white-breasted nuthatches (*Sitta carolinensis*). *Behavioral Ecology and Sociobiology*,64, 1187-1198.

C.P.V.C., FL

Owens, J. L. & Freeberg, T. M. (2007). Variation in chick-a-dee calls of tufted titmice, *Baeolophus bicolor*: note type and individual distinctiveness. *Journal of the Acoustical Society of America, 122*, 1216-1226.

Invited Speaking Engagements

2017. Earth and Life Sciences Institute, Tokyo Tech, Japan

- 2016. Michael P. Malone Conference, Montana State University
- 2015. Furman University's department of Philosophy
- 2015. Eastern Kentucky University's Piper Faculty Ethics Seminar
- 2015. Harlan County Kentucky School District's Evarts Elementary School

Conference Presentations

- **2016.** The matter of social and vocal complexity in an increasingly noisy world. **Owens, J.L.** *Invited Speaker*. Michael P. Malone Conference 2016.
- **2016.** Unsolicited cat calls: A feral repertoire. Waller, S., **Owens, J.L.**, Olsen, M, Fontaine, A, Kloth, C. ISBE 2016.
- **2015.** Crowdsourcing wolf howls: Do you see what I see? **Owens, J.L**. *Symposium presenter* Behavior 2015.
- **2014.** Using crowdsourcing to bridge the gap between animal communication scientists and nonscientists. **Owens, J.L**. *Symposium presenter*. 15th meeting of the International Society for Behavioral Ecology.
- **2013.** Traffic noise and parid behavior: an experimental test. **Owens, J.L.** 50th Annual Conference of the Animal Behavior Society. *Poster presentation.
- 2012. Phylogenetic relatedness and immediate early gene expression in black-capped chickadees. Sturdy, C.B., Avey, M.T., Bloomfield, L.L., Elie, J.E., Freeberg, T.M., Guillette, L.M., Hoeschele, M., Lee, H., Moscicki, M. & Owens, J.L. 19th Annual International Conference of Comparative Cognition.
- 2012. To (Chick-a-) Dee, or not to Dee? That is the que! stion. Sturdy, C.B., Avey, M.T., Bloomfield, L.L., Elie, J.E., Freeberg, T.M., Guillette, L.M., Hoeschele, M., Lee, H., Moscicki, M. & Owens, J.L. 2012 Royce Conference.
- **2011.** Anthropogenic noise disrupts behavior in Parids: an experimental test of the effects of traffic noise on Carolina chickadees and tufted titmice. **Owens, J.L.** *Invited Speaker.* 119th annual meeting of the American Psychology Association.

- **2011.** Long-term exposure to traffic noise affects social and risk taking behavior. **Owens, J.L.** International Behavior Conference; a joint meeting of the Animal Behavior Society and the International Ethological Conference, Bloomington, IN.
- **2010.** Traffic noise and Parid behavior: an experimental test. **Owens, J.L.** 47th Annual Conference of the Animal Behavior Society. *Poster presentation.
- **2009.** Variation in social and vocal behavior of tufted titmice across habitat type. **Owens, J.L.** 127th Annual Meeting of the American Ornithologists' Union.
- 2006. Variation in chick-a-dee calls of tufted titmice, Baeolophus bicolor: note type and individual distinctiveness. Owens, J.L. 43rd Annual Conference of the Animal Behavior Society.
 *Poster presentation.
- 2005. The effect of an enriched environment on behavior and anatomy following medial frontal cortex contusions. Owens, J.L. Annual Conference of the Midwestern Psychological Association. *Poster presentation.

Synergistic Activities & Outreach 2006 - Current. Mentoring Student Research

• As a doctoral student I served as the research mentor for more than 10 undergraduate students and one high school student. These students were trained in field work and involved in all aspects of research, earning co-authorship and continuing onto 5 graduate programs.

• As a first year Assistant professor I advised the independent research of two undergraduate students who later presented their work at the Blue Ridge Undergraduate Research Conference, March 2014.

2007 - Current. Interdisciplinary Collaboration, Research Consortiums

• I have established collaborative relationships with colleagues at University of Alberta, University of Tennessee, Montana State University, the National Institute of Mathematical and Biological Sciences and the University of Cambridge.

• This early collaborative work has proven wildly successful. Resulting products include: the Canid Howl Project, media attention, new collaborations, a research symposium at ISBE 2014 & Behavior 2015, the formation of the Cooperative Predator Vocalization Consortium and several on-going research projects, publications and presentations.

2010 - Current. Community Outreach

• I have participated in several public presentations about animal behavior and communication, animal safety and pet training, including the annual Owl Prowl at the University of Tennessee Forest Resources Research and Education Center.

• In Spring 2015 I was invited by a student in my Educational Psychology course to give the 3^{rd} and 4^{th} grade students of Evarts Elementary a presentation of how animals communicate with one another. I took the opportunity to bring along my handicapped pit bull as an outreach tool.

Selected Media Coverage

"Canid Howl Project" *Scientific American* Online <u>http://www.scientificamerican.com/citizen-science/canid-howl-project/</u>

'In brief.' Monitor on Psychology, 42(9) pg 25. http://www.apa.org/monitor/2011/10/inbrief.aspx

"Scientists Need Your Help to Decode the Secret Language of Wolves." *TakePart* Magazine. March 4, 2015. <u>http://www.takepart.com/article/2015/03/04/decoding-your-dogs-bark-save-gray-wolves</u>

"Speak, Boy, Speak!" *onEarth* Magazine. March, 2015. <u>http://www.onearth.org/earthwire/canid-howl-project</u>

Selected Honors

2015 -Research Fellowship, Union College \$600

- 2014 Mini-Grant Research Award, Lincoln Memorial University \$2500
- **2013** -Selected as Honorary Faculty Coach for LMU Women's Basketball -Science Alliance Award for Excellence in Research, University of Tennessee \$2500
- 2011-Research featured in *Monitor on Psychology* (Vol. 42, No. 9, pg. 25)
 -Recognized by the 6th Division of the American Psychological Association (APA) as an outstanding Graduate Student Researcher.
 - -Nominated by the 6th Division of the APA and accepted by the APA Science Student Council and APA Board of Scientific Affairs to participate in *Datablitz*.
- 2010 Tennessee Ornithological Society's Conservation Research Grant \$500
- 2009 -Dissertation Award, Psychology Department, University of Tennessee \$800
 -Top-up Fellowship, Psychology Department, University of Tennessee (*salary*)
 -Science Alliance Award for Excellence in Research, University of Tennessee \$2500
 -J.B. Owen Conservation Award, Tennessee Ornithological Society \$300
- 2003 2007 -2007 Marjorie and Louis Gilbert Scholarship, Mote Marine Laboratory \$1800
 -Psi Chi Undergraduate Research Award ~\$1200
 -National Science Foundation Undergraduate Research Experience ~\$3500
 -Wade Family Scholarship, Duke University Marine Laboratory ~ \$1100

References

Research Colleagues & Personal References

Arik Kershenbaum, Ph.D.

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Angela Dassow, Ph.D.

*Research Collaborator Assistant Professor of Biology, Carthage College *Phone:* (262) 551-6244 *E-mail:* adassow@carthage.edu

Academic Colleagues & Personal References

Kate Spencer, Ph.D. Licensed Clinical Psychologist

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