Evan M. Hill, PhD

Curriculum Vitae

Department of Psychology University of Nebraska at Kearney 320G Copeland Hall 2507 11th Avenue Kearney, NE 68849 <u>hillem@unk.edu</u> Ph: (308) 865-8241

EDUCATION

University of Toledo2011PhD, Psychology (Emphasis: Biopsychology and Auditory Neuroscience)2011Dissertation: A Comparison of Behavioral and Auditory Brainstem Response2011Measures of Hearing in the Laboratory Rat (Rattus norvegicus).2011

MA, Psychology 2009 Master's Thesis: A Comparison of Behavioral and Auditory Brainstem Response Measures of Conductive Hearing Loss in Humans.

Oklahoma State University BS, Psychology

RESEARCH INTERESTS

- The origins and purpose of low-frequency auditory sensitivity in birds
- Perception of auditory phenomena in non-human animals
- Automation of behavioral research

CURRENT PROJECTS

- Identification of ability for laboratory rats to detect auditory illusions
- Determination of in-air hearing range and sensitivity of the diamond dove (*Geopelia cuneata*)

2006

- Development of an automated apparatus to deter nuisance animals
- Brain perfusion identification of new LAT-1 transporter substrates for drug delivery

PROFESSIONAL POSITIONS

 Assistant Professor of Psychology, University of Nebraska at Kearney Director of Psychobiology Program Develop curriculum that prepares students for post-graduate work in biological psychology or health science related fields Mentor students in research projects related to learning, conditioning, physiology of sensory processes, and experimental automation Director of Physiological Psychology Lab Instruct students in the methodologies commonly used in the assessment of the physiological origins of behavior Develop and refine techniques for testing species not commonly used in a laboratory setting Comparatively assess hearing sensitivity and evolutionary origins of non-mammalian vertebrates 	July '14 – Present
 Research Associate, University of Toledo Translational Research Stimulation Award, ProMedica Collaborative Project <i>Identifying drugs that affect tinnitus</i>. Principle Investigators: Dr. Henry Heffner and Dr. Aaron Benson Investigation of the potential for pharmaceutically preventing the development of noise induced tinnitus in rats. Behaviorally assessed hearing range and sensitivity in the domestic chicken. 	May '13 – June '14
Postdoctoral Research Associate, University of Toledo Mentor: Dr. Henry Heffner Investigation of potential methods for identifying the behavioral auditory sensitivity of the bearded lizard. Investigation of low-frequency hearing sensitivity in the domestic pigeon.	Jan '12 – April '13
TEACHING EXPERIENCE	
Assistant Professor, University of Nebraska at Kearney General Psychology (PSY 203GS), Human Development (PSY 230GS) Behavioral Statistics with Lab (PSY 250), Learning and Conditioning (PSY 310) with lab (PSY 310L), Sensation and Perception (PSY 312), Physiological Psychology (PSY 313) with lab (PSY 313L), Psychopharmacology (PSY 465), Neuropsychology (PSY 470)	July '14 - Present
Adjunct Instructor, University of Toledo Principles of Psychology (PSY 1010), Lifespan Development (PSY 2510), Statistical Methods (PSY 2100)	Jan '12 – May '14

Guest Lecturer

University of Nebraska – Kearney Topic: What happens in our brain at death? A look at the neurology of the end of life process.	Fall 2017 Spring 2018 Spring 2019
University of Nebraska – Kearney Topic: Evolution of the Middle and Inner Ear: Previous findings on the evolution of auditory sensory systems and future research directions	Fall 2015
Sigma Xi Scientific Honor Society – Science Café Topic: The Science of Hearing: How hearing became a common sensory system and why psychologists should study this phenomenon.	Spring 2015
University of Nebraska – Kearney Topic: Comparative Hearing Research: What differences exist in hearing ability between species, and what purpose do they serve?	Spring 2015

PUBLICATIONS

- Strawn, S., & Hill, E. (2020). Japanese quail (*Coturnix japonica*) audiogram from 16 Hz to 8 kHz. *Journal of Comparative Physiology A*, 206, 665-670. doi: <u>10.1007/s00359-020-01428-4</u>
- Howerter, D., Larson, J., & Hill, E. (2018). The Behavioral Effects of Oral Psychostimulant Ingestion on a Laboratory Rat Sample: An Undergraduate Research Experience. *Journal of Undergraduate Neuroscience Education*, 17(1), A72-80.
- Hill, E.M. (2017). Audiogram of the Mallard Duck (*Anas platyrhynchos*) from 16 Hz to 9 kHz. *Journal of Comparative Physiology A*, 203, 929-934. doi: <u>10.1007/s00359-017-1204-6</u>
- Hill, E.M., Koay, G., Heffner, R.S., & Heffner, H.E. (2014). Audiogram of the chicken (*Gallus gallus domesticus*) from 2 Hz to 9 kHz. *Journal of Comparative Physiology A*, 200, 863-870. doi: 10.1007/s00359-014-0929-8
- Heffner, H. E., Koay, G., Hill, E., & Heffner, R. S. (2013). Conditioned suppression/avoidance as a procedure for testing hearing in birds: the domestic pigeon (*Columba livia*). *Behavior Research Methods*, 45, 383-392. doi: <u>10.3758/s13428-012-0269-y</u>

Manuscripts in Preparation

Venteicher, B., Merklin, K., Ngo, H., Chien, H.-C., Hutchinson, K., Colas, C., Way, H., Griffith, J., Alvarado, C., Springer, S., Finke, K., Stoner, L., Chandra, S., Hill, E., Schlessinger, A., Giacomini, K., & Thomas, A.A. (in preparation). Size and electronic effects on L-type amino acid transporter 1 activity of aromatic amino acids. Intended journal: *Bioorganic and Medicinal Chemistry Letters*.

PROFESSIONAL PRESENTATIONS

- Collins, A., & Hill, E. (2019, December). *Laboratory Rats (Rattus norwegicus) Detect the Fanssen Effect*. Poster presented at the 178th meeting of the Acoustical Society of America, San Diego, CA.
- Merklin, K., Venteicher, B., Way, H., Griffith, J., Alvarado, C., Springer, S., Finke, K., Stoner, L., Augustyn, E., Ngo, H., Chien, H.-C., Colas, C., Schlessinger, A., Giacomini, K., Chandra, S., Hill, E., & Thomas, A.A. (2019, October). *Investigating the effect of the ester linkage between phenylalanine and ketoprofen in a LAT1 targeted prodrug*. Poster presented at the 54th Midwest Regional Meeting of the American Chemical Society, Wichita, KS.
- Strawn, S., & Hill, E. (2017, December). Behavioral and electrophysiological assessment of hearing in the Japanese quail (Coturnix japonica). Oral presentation at the 174th meeting of the Acoustical Society of America, New Orleans, LA.
- Hill, E. (2016, December). Demonstration of limited infrasonic sensitivity in the mallard duck (Anas platyrhynchos). Poster presented at the 5th Joint Meeting of the Acoustical Society of America and Acoustical Society of Japan, Honolulu, HI.
- Hill, E. (2013, April). Approximating auditory sensitivity using the auditory brainstem response.Poster presented at the Annual Symposium on Research in Psychiatry, Psychology, andBehavioral Science, Toledo, OH.
- Hill, E. (2012, February). A comparison of behavioral and auditory brainstem response measures of conductive hearing loss in humans. Poster presented at the Annual meeting of the Association for Research in Otolaryngology, San Diego, CA.

GRANT ACTIVITY

- Co-Investigator with Nate Bickford: Evolutionary origins of auditory abilities in birds and reptiles: National Science Foundation, Division of Environmental Biology Core Programs, 2016, Unfunded.
- Co-Investigator with Nate Bickford: Comparative evaluation of auditory sensitivity in birds and reptiles: National Science Foundation, Division of Integrative Organismal Systems, 2016, Unfunded.

STUDENT AWARDS

Faculty Mentor to Alayna Collins: Robert W. Young Award for Undergraduate Student Research in Acoustics – Acoustical Society of America, 2018, Funded \$380.00

PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS

2015 - Present
2013 - Present
2015 - Present
2014 - Present
2015-Present
2018 - Present
2016 - Present
2015-Present