

Curriculum Vitae

Derick H. Lindquist, Ph.D.

The Ohio State University
Department of Psychology
1835 Neil Avenue, Room 49
Columbus, OH 43210

Email: lindquist.40@osu.edu
Phone: 614-292-2236
Fax: 614-688-4733
<http://faculty.psy.ohio-state.edu/lindquist>

EDUCATION

2004 M.S., M.Phil., Ph.D., Behavioral Neuroscience, Yale University
1995 B.A., Psychology, Weber State University

PROFESSIONAL EXPERIENCE

2010- Assistant Professor, Dept. of Psychology, The Ohio State University
2012- Assistant Professor, Dept. of Neuroscience, The Ohio State University
2009-2010 Senior Research Scientist, Dept. of Psychology, The Ohio State University
2006-2009 Research Associate, Dept. of Molecular Biosciences, University of Kansas
2004-2006 Postdoctoral Fellow, Dept. of Psychology, Indiana University

RESEARCH SUPPORT

2014-2015 **PI.** Dr. Derick H. Lindquist
SBS Small Research Grant, The Ohio State University
2012-2014 **PI.** Dr. Derick H. Lindquist
ABMRF, the Foundation for Alcohol Research, grant 60034780
- *An investigation into the neurodevelopmental consequences of neonatal ethanol exposure on forebrain NMDA receptor composition and function in classically conditioned adult rats.*
2009-2011 **Co-PIs.** Drs. William Hetrick and Joseph Steinmetz
Co-I. Dr. Derick H. Lindquist
National Institute of Health, R01 MH074983
- *Cerebellar timing dysfunction in schizophrenia.*
2004-2006 NRSA T32 Institutional research training grant award
2001-2004 NRSA F31 Predoctoral training grant award

PUBLICATIONS

Peer-Reviewed Research:

Lindquist, D.H. (In preparation) Emotion in motion: A three stage model of aversive classical conditioning.
Goodfellow, M.J., Shin, Y.J., and **Lindquist D.H.** (In preparation) Altered Interleukin-1 signaling in FASD model rats following trace fear conditioning contributes to impairments in memory consolidation.
Dause, T.J. and **Lindquist, D.H.** (In preparation). Postnatal ethanol and the developing hippocampus in male rats: Mast cells and microglia.
Pochiro, J.M., Goodfellow, M.J., and **Lindquist D.H.** (In Preparation) GluN2B-dependent synaptic plasticity in the hippocampal trisynaptic circuit of adult rats administered postnatal ethanol.

- Goodfellow, M.J., Shin, Y., and **Lindquist, D.H.** (2018) Mitigation of postnatal ethanol-induced neuroinflammation ameliorates trace fear memory impairments in juvenile rats. *Behavioural Brain Research*, 338: 28-31.
- MacIvane, N.M., Pochiro, J.M., Hurwitz, N.R., Goodfellow, M.J., and **Lindquist D.H.** (2016) Recognition memory is selectively impaired in adult rats exposed to binge-like doses of ethanol during early postnatal life. *Alcohol*, 57: 55-63.
- Pershing, M.L., Phenix, D., Valentini, V., Pocivavsek, A., **Lindquist, D.H.**, Schwarcz, R., Bruno, J.P. (2016) Prenatal kynurenine exposure in rats: Age-dependent changes in NMDA receptor expression and conditioned fear responding. *Psychopharmacology*, 233(21-22): 3725-35.
- Pochiro, J.M. and **Lindquist, D.H.** (2016) Central amygdala lesions inhibit pontine nuclei acoustic reactivity and retard delay eyeblink conditioning acquisition in adult rats. *Learning and Behavior*, 44(2): 191-201.
- Goodfellow, M.J., Abdulla, K.A., and **Lindquist, D.H.** (2016) Neonatal ethanol exposure impairs trace fear conditioning and alters NMDA receptor subunit expression in adult male and female rats. *Alcoholism, Clinical and Experimental Research*, 40(2): 309-18.
- Goodfellow, M.J. and **Lindquist, D.H.** (2014) Significant long-term, but not short-term, hippocampal-dependent memory impairment in adult rats exposed to alcohol in early postnatal life. *Developmental Psychobiology*, 56(6): 1316-26.
- Dupont, C.M., Coppola, J.J., Kaercher, R.M., and **Lindquist, D.H.** (2014) Impaired trace fear conditioning and diminished ERK1/2 phosphorylation in the dorsal hippocampus of adult rats administered alcohol as neonates. *Behavioral Neuroscience*, 128(2): 187-198.
- Lindquist, D.H.** (2013) Hippocampal-dependent Pavlovian conditioning in adult rats exposed to binge-like doses of ethanol as neonates. *Behavioural Brain Research*, 242: 191-99.
- Lindquist, D.H.**, Sokoloff, G., Milner, E.E., and Steinmetz, J.E. (2013) Neonatal ethanol exposure results in dose-dependent impairments in the acquisition and timing of the conditioned eyeblink response and altered cerebellar interpositus nucleus and hippocampal CA1 unit activity in adult rats. *Alcohol*, 47(6): 447-57.
- Lindquist, D.H.**, Mahoney, L.P., and Steinmetz, J.E. (2010) Conditioned fear in adult rats is facilitated by the prior acquisition of a classically conditioned motor response. *Neurobiology of Learning and Memory*, 94(2): 167-75.
- Lindquist, D.H.**, Vogel, R.W., and Steinmetz, J.E. (2009) Associative and non-associative blinking in classically conditioned adult rats. *Physiology & Behavior*, 96 (3): 399-411.
- Vogel, R.W., Amundson, J.C., **Lindquist, D.H.**, and Steinmetz J.E. (2009) Eyeblink conditioning under an interstimulus interval switch in rabbits with a pharmacologically-disengaged cerebellar cortex. *Behavioral Neuroscience*, 123(1): 62-74.
- Lindquist, D.H.**, Sokoloff, G., and Steinmetz, J.E. (2007) Ethanol-exposed neonatal rats are impaired as adults in classical eyeblink conditioning at multiple unconditioned stimulus intensities. *Brain Research*, 1150: 155-166.
- Sokoloff, G., **Lindquist, D.H.**, and Steinmetz, J.E. (2006) The effect of context and CS preexposure on acquisition of the classically conditioned eyeblink response in rats. *International Journal of Comparative Psychology*, 19: 398-416.
- Lindquist, D.H.** and Brown, T.H. (2004) Temporal encoding in fear conditioning revealed through associative reflex facilitation. *Behavioral Neuroscience*, 118(2): 395-402.
- Lindquist, D.H.**, Jarrard, L.E. and Brown, T.H. (2004) Perirhinal cortex supports delay fear conditioning to rat ultrasonic social signals. *The Journal of Neuroscience*, 24(14): 3610-17.

Lindquist, D.H. and Brown, T.H. (2004) Amygdalar NMDA receptors control the expression of associative reflex facilitation and three other conditional responses. *Behavioral Neuroscience*, 118(1): 36-52.

Choi, J.S., **Lindquist, D.H.**, and Brown, T.H. (2001) Amygdala lesions prevent conditioned enhancement of the rat eyeblink reflex. *Behavioral Neuroscience*, 115(4): 764-75.

Articles & Chapters:

Lindquist, D.H., Steinmetz, J.E., Thompson, R.F. (2012) The cerebellum and classical eyeblink conditioning. In Manto, M., Gruol, D., Schmahmann, J., Koibuchi, N., Rossi, F. (Eds.) *Handbook of the Cerebellum and Cerebellar Disorders* (pp. 1175-1190), New York: Springer Science.

Steinmetz, J.E. and **Lindquist, D.H.** (2009) Neuronal basis of learning. In Berntson, G.G., Cacioppo, J.T. (Eds.) *Handbook of Neuroscience for the Behavioral Sciences*, (pp. 507-527). Hoboken, NJ: John Wiley & Sons.

Lindquist, D.H. and Steinmetz, J.E. (2008) Classical conditioning. In Darity, W.A. (Ed.) *International Encyclopedia of Social Sciences, 2nd Ed., 9 vols.* (pp. 572-75). Farmington Hills, MI: Macmillan Reference USA.

Brown, T.H., Furtak, S. and **Lindquist, D.H.** (2004) Hebbian synapses. In Adelman, G. and Smith, B.H. (Eds.) *Encyclopedia of Neuroscience, 3rd edition, (CD-ROM)*. New York, NY: Elsevier Science.

Brown, T.H., Byrne, J.H., Labar, K., LeDoux, J., **Lindquist, D.H.**, Thompson, R.F., and Teyler, T.J. (2003) Learning and memory: Basic mechanisms. In Byrne, J.H. and Roberts, J.L. (Eds.) *Cellular and Molecular Neuroscience*, (pp. 499-574). San Diego, CA: Academic Press.

Brown, T.H., and **Lindquist, D.H.** (2003) Long-term potentiation: Amygdala. In Byrne, J.H. (Ed.) *Learning and Memory, 2nd Ed.* (pp. 342-46). Farmington Hills, MI: Macmillan Reference.

TALKS AND COLLOQUIA

420: *Weed*. The Steam Factory, Steam Exchange, The Ohio State University, Columbus, OH. April 20, 2017.

Ethanol-induced Neuroinflammation in the Developing Hippocampus: Mast Cells and Microglia. ICPE: Fetal Alcohol Spectrum Disorders 2017. Vancouver, BC. March 1, 2017.

FASD animal models and the deleterious effects of early-life ethanol exposure. Cognitive Science Pro-seminar, The Ohio State University, Columbus, OH. January 31, 2017.

Fetal alcohol exposure in rat pups. Biological Sciences Scholars Program, The Ohio State University, Columbus, OH. January 30, 2017.

Early-life alcohol exposure, forebrain development, and long-term memory. Psychology Enrichment Program, The Ohio State University, Columbus, OH, October 6, 2016.

Addiction: Brain and Behavior. The Knox County Addiction Conference: Recovery Matters. Kenyon College, Gambier, OH. July 29, 2016.

FASD: Rodent models and anti-inflammatory medications. Department of Psychology and Neuroscience, Denison University, Granville, OH. November 19, 2015.

Teaching undergraduate neuroscience. Midwest/Great Lakes Undergraduate Research Symposium in Neuroscience (mGluR) annual conference. The Ohio State University, Columbus, OH. October 3, 2015.

Pathway to a neuroscience career. Nu Rho Psi Honor Society Monthly Mojo. The Ohio State University, Columbus, OH. October 1, 2015.

Depression: Behavior and the Brain. No Place for Hate Week. The Ohio State University, Columbus, OH. April 13, 2015.

Impaired synaptic plasticity and cognitive function in a rat model of Fetal Alcohol Spectrum Disorder. Department of Neuroscience, Cell Biology, and Physiology Fall Seminar Series, Wright State University, Dayton, OH. September 5, 2014.

Early life ethanol exposure induces long-lasting deficits in forebrain-dependent Pavlovian conditioning. Department of Psychology, Miami University, Oxford, OH. May 9, 2014.

A rodent model of Fetal Alcohol Syndrome: Impaired classical conditioning in adult animals, Center for Cognitive Science Colloquium, The Ohio State University, Columbus, OH. March 2, 2012.

Learning, with feeling. Dept. of Psychology, The Ohio State University, Columbus, OH. Oct. 5, 2010.

Classical eyeblink conditioning: Behavior, Neurobiology, and the Neurodevelopmental consequences of alcohol. Department of Psychology, The Ohio State University, Columbus, OH. Dec. 2, 2009.

Fetal Alcohol Syndrome. Department of Molecular Biosciences, University of Kansas, Lawrence, KS. April 10, 2008; April 15, 2009.

Pavlovian conditioning: Motion and Emotion. Department of Molecular Biosciences, University of Kansas, Lawrence, KS. Nov. 11, 2008.

The effects of neonatal ethanol exposure on the developing cerebellum: Functional consequences in the adult rat. Merrill Conference: Neurobehavioral Approaches to the Study of Clinical Disorders, Tempe, AZ. March 13, 2008.

An animal model of fetal alcohol syndrome: Functional and structural consequences of neonatal ethanol exposure in the adult rat. Department of Molecular Biosciences, University of Kansas, Lawrence, KS. March 4, 2008.

Cortical-subcortical innervation of the amygdala: Dual input synaptic plasticity and auditory fear conditioning. Center for the Integrative Study of Animal Behavior (CISAB), Indiana University, Bloomington, IN. Dec. 4, 2004.

Perirhinal cortex-amygdala interactions in acquiring, encoding, and expressing complex S-R associations. Department of Psychology, Yale University, New Haven, CT. Oct. 17, 2003.

Perirhinal cortex required for delay fear conditioning to a complex auditory conditional stimulus. Pavlovian Society Annual Meeting, Indiana University, Bloomington, IN. Sept. 25-27, 2003.

Temporal encoding in fear conditioning revealed through modulation of the unconditioned eyeblink reflex. Neurobiology of Learning & Memory Annual Conference, Park City, UT. Jan. 11, 2003.

Antagonizing NMDA receptors in the rat amygdalar basolateral complex blocks expression of conditioned eyeblink enhancement. Neurobiology of Learning & Memory Annual Conference, Park City, UT. Jan. 12, 2002.

Fear-produced R1 enhancement is blocked by amygdala lesions. N.E.U.R.O.N. Conference. Wellsley, MA. April 8, 2001.

TEACHING EXPERIENCE

The Ohio State University: Instructor

NGP 7887: Seminar Topics in Neuroscience, FA2013

Psych 305: Drugs & Behavior, SP2012

Psych 313: Behavioral Neuroscience, FA2011

Psych 600: Psychology of Learning, FA2010, WI2011, FA2011, WI2012

Psych 726: Seminar in Behavioral Neuroscience, SP2011

Psych 3313: Introduction to Behavioral Neuroscience, FA2012, SP2014, FA2015

Psych 4501: Advanced Behavioral Neuroscience, SP2015, SP2017

Psych 5600: Psychobiology of Learning and Memory: SP2013, FA2013, FA2014, SP2016, FA2016

Psych 5898: Seminar in Behavioral Neuroscience, SP2013, SP2015
Psych 6806: Neurobiology of Learning and Memory, SP2014

The Ohio State University: Co-Instructor

NGP 7002: SP2010, SP2011, SP2012, SP2013, SP2014, SP2015, SP2016, SP2017
Psych 7898: Advanced Seminar in Behavioral Neuroscience, FA2014

University of Kansas: Instructor

Bio 435: Introduction to Neurobiology, FA2008

THESIS COMMITTEES

Senior Thesis

Tyler Dause, April 2017 (Research Advisor)
Youn Ju (Chris) Shin, April 2017 (Research Advisor)
Caitlin Post, April 2017 (Committee Member)
Dominic Julian, April 2016 (Committee Member)
Connor Nealer, July 2015 (Committee Member)
Nicole MacIlvane, April 2015 (Research Advisor)
Ryan O'Neil, April 2015 (Committee Member)
Steven Platko, April 2015 (Committee Member)
Kathleen Kisserberth, April 2015 (Committee Member)
Khalid Abdulla, December 2014 (Research Advisor)
Joseph Pochiro, May 2013 (Research Advisor)
Alexis Wagner, April 2013 (Committee Member)
Caitlin Dupont, May 2012 (Research Advisor)
James Speildenner, May 2012 (Committee Member)
Aarthi Gobinath, April 2012 (Committee Member)

Masters

Molly Goodfellow, M.S., December 2013 (Research Advisor)
Sara Sabihi, M.S., August 2013 (Committee Member)
David Bortz, M.S., November 2012 (Committee Member)

Candidacy

Joseph Pochiro, August 2016 (Research Advisor)
David Phenis, May 2016 (Committee Member)
Molly Goodfellow, November 2015 (Research Advisor)
Daniel Kochli, Miami University, August 2015 (Committee Member)
Michelle Pershing, December 2013 (Committee Member)
Jamie Pierson, Miami University, September 2013 (Committee Member)
Achik Haim, July 2013 (Committee Member)
Kristin Supe, September 2012 (Committee Member)
Katelin Hansen, April 2012 (Committee Member)

Ph.D.

Molly Goodfellow, Ph.D., April 2017 (Research Advisor)

Katelin Hansen, Ph.D., April 2015 (Committee Member)
Michelle Pershing, Ph.D., November 2014 (Committee Member)
Sarah Hopp, Ph.D., September 2014 (Committee Member)
Marissa Rodenburg, Ph.D., August 2014 (Grad Representative)
Kristin Supe, Ph.D., June 2014 (Committee Member)
John Morris, Ph.D., March 2013 (Committee Member)
Robert Mitchell, Ph.D., June 2013 (Grad Representative)
Katie Alexander, Ph.D., April 2011 (Committee Member)
Kelly Telu, Ph.D., March 2011 (Grad Representative)
Tom Scaife, Ph.D., August 2010 (Grad Representative)

ACADEMIC/SCIENTIFIC SERVICE

2017-18 Committee Organizer for 2017 Teaching Conference, The Ohio State University
2008-2009 Co-organizer, Systems-level Neuroscience Symposium, University of Kansas

Ad-hoc Peer Reviewer: *Acta Neurobiologiae Experimentalis*, *Alcohol*, *Alcoholism: Clinical and Experimental Research*, *Behavioural Brain Research*, *Behavioral and Cognitive Neuroscience Reviews*, *Behavioral Neuroscience*, *Behavioral Sciences*, *Cerebellum*, *Cerebral Cortex*, *Frontiers in Psychiatry*, *Integrative Physiology*, *International Journal of Developmental Neurobiology*, *Journal of Neuroscience Research*, *Jove*, *Learning & Memory*, *Metabolic Brain Disease*, *Neurobiology of Aging*, *Neurobiology of Learning and Memory*, *Neuropharmacology*, *Plos One*, *Science Reports*

Funding Agency Reviewer: Israeli Science Foundation, Biotechnology and Biological Sciences Research Agency (UK)

Early Career Reviewer: NAL study section (Neurotoxicology and Alcohol). February 23-24, 2017. San Francisco, CA.

ACADEMIC/SCIENTIFIC AWARDS

2015-16 Psychology Department Distinguished Teaching Award, The Ohio State University

PROFESSIONAL SERVICE

The Ohio State University

Chronic Brain Injury Discovery Group: 2017-
Interdisciplinary Graduate Programs Symposium Judge: 2013-
Neuroscience Undergraduate Major Steering Committee: 2012-
Neuroscience Undergraduate Research Symposium Judge: 2012-
Denman Undergraduate Research Forum Judge: 2010-
Eminence Fellows Program, University Honors & Scholars Center: 2012-2013
CIC SROP (summer research opportunities program) Moderator: 2011
Honors Scheduling Bonanza: 2011
Neuroscience Graduate Program Poster Day Judge: 2010-2013
Hayes Forum Judge: 2010-2012
Institutional Animal Care and Use (IACUC) Member: 2010-2012

Department of Psychology

Teaching Conference Planning Committee: 2017-

Diversity Committee (Chair): 2016-

Diversity Committee: 2015-2016

Quantitative Psychology Search Committee: 2016-2017

Awards Committee: 2013-2015

BN Area Coordinator: 2013-2014

Business Continuity Planning Commission: 2011-2012

Developmental Neuroscience Search Committee: 2011-2012

Speakers Committee: 2010-2012

Equipment Committee (Chair): 2010-2012

PROFESSIONAL SOCIETIES

2013- Fetal Alcohol Spectrum Disorder (FASD) Study Group

2013- Research Society on Alcoholism

2001- The Pavlovian Society

1999- Society for Neuroscience

1999-2001 American Association for the Advancement of Science (AAAS)