

Amy Christensen, Ph.D.

Vital

Title Research Assistant Professor

Current Address: University of Southern California
Davis School of Gerontology
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Los Angeles, CA 90089

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Education

2005 University of California, Los Angeles, B.S., Physiological Science

2005 University of California, Los Angeles, B.S., Anthropology

2012 University of California, Los Angeles, Ph.D., Neurobiology
Thesis Advisor: Paul Micevych
Thesis Title: Molecular Aspects of the Regulation of Female Sexual Behavior

2012-2018 University of Southern California, Postdoctoral Fellowship
Advisor: Christian J. Pike

Teaching Responsibilities

2018 Co-instructor, Summer@USC Neuroscience Course, University of Southern California

2017 Co-instructor, Health Promotion and Disease Prevention Studies 320: Biological and Behavioral Basis of Disease, University of Southern California

2010 Teaching Assistant, Life Sciences 3: Introduction to Molecular Biology, University of California, Los Angeles

2009 Teaching Assistant, Life Sciences 3: Introduction to Molecular Biology, University of California, Los Angeles

Invited Talks and Awards

2022 AARP Best Research Scientist

2019 California State University Long Beach Lecture Series, Long Beach, CA – April

2018 UCLA Laboratory of Neuroendocrinology Speaker Series, Los Angeles, CA – April

2018 5th Annual USC Diabetes and Obesity Research Symposium, Los Angeles, CA – February

2017 1st Annual Finch Alzheimer's Disease Symposium, Los Angeles, CA – December

2016	What's Hot in Aging Research, Los Angeles, CA – April
2015	Presidential Poster Award- Endocrine Society Meeting – March
2012	Pfizer Scholar Award- FASEB SRC on Steroid Hormone Regulation of Transcription, Base Village, CO – July
2011	Young Investigator Travel Award- United States-South America Workshop on Neuroendocrinology – August
2011	Winter Conference on Brain Research, Keystone, CO – January

Bibliography

Christensen A, Pike CJ. Effects of APOE Genotype and Western diet on metabolic phenotypes in female mice. *Metabolites* 2023; 13: 287.

Valencia-Olvera AC, Maldonado Weng J, **Christensen A**, LaDu MJ, Pike CJ. Role of estrogen in women's Alzheimer's disease risk as modified by APOE. *Journal of Neuroendocrinology* 2022; e13209. doi: 10.1111/jne.13209.

Christensen A, Liu J and Pike CJ. Aging reduces estradiol protection against neural but not metabolic effects of obesity in female 3xTg-AD mice. *Frontiers in Aging Neuroscience* 2020; 12:113.

Christensen A and Pike CJ. Staining and quantification of β -amyloid pathology in transgenic mouse models of Alzheimer's disease. *Methods in Molecular Biology* 2020; 2144:211-221.

Christensen A and Pike CJ. APOE genotype affects metabolic and Alzheimer-related outcomes induced by Western diet in female EFAD mice. *FASEB Journal* 2019;33:4054-4066.

Moser VA, **Christensen A**, Liu J, Zhou A, Yagi S, Beam CR, Galea LAM, Pike CJ. Effects of aging and testosterone treatment on neural and metabolic outcomes of high-fat diet in male brown Norway rats. *Neurobiology of Aging* 2019; 73:145-160.

Yen K, Wan J, Mehta HH, Miller B, **Christensen A**, Levine ME, Salomon MP, Brandhorst S, Xiao J, Kim S-J, Navarrete G, Campo D, Harry J, Longo V, Pike C, Mack WJ, Hodis HN, Crimmins EM, Cohen P. The mitochondrial peptide humanin prevents age-related cognitive decline in mice and is associated with improved cognitive age in humans. *Scientific Reports* 2018; 8(1):14212.

Christensen A and Pike CJ. TSPO ligand PK11195 improves outcomes in aged female 3xTg-AD mice. *Neuroscience Letters* 2018; 683:7-12.

Christensen A and Pike CJ. Age-dependent regulation of obesity and Alzheimer outcomes by hormone therapy in 3xTg-AD mice. *PLoS One* 2017; 12(6):e0178490.

Cacciottolo M, **Christensen A**, Moser VA, Liu J, Pike CJ, Sullivan PM, Morgan TE, Dolzhenko E, Charidimou A, Wahlund LO, Wiberg MK, Shams S, Chiang GC, Finch CE. The APOE4 allele shows opposite sex bias in microbleeds and Alzheimer's disease of humans and mice. *Neurobiology of Aging* 2016; 37:47-57.

Christensen A and Pike CJ. Menopause, obesity and inflammation: interactive risk factors for Alzheimer's disease. *Frontiers in Aging Neuroscience* 2015; 7:130.

Christensen A, Dewing P, Micevych P. Immediate early gene activity-regulated cytoskeletal-associated protein regulates estradiol-induced lordosis behavior in female rats. *Journal of Neuroscience Research* 2015; 93(1):67-74.

Jayaraman A*, **Christensen A***, Moser VA, Vest RS, Miller CP, Hattersley G, Pike CJ. Selective androgen receptor modulator RAD140 is neuroprotective in cultured neurons and kainate-lesioned male rats. *Endocrinology* 2014; 155(4):1398-406.

* contributed equally to this work

Sinchak K, Dewing P, Ponce L, Gomez L, **Christensen A**, Berger M, Micevych P. Modulation of the arcuate nucleus-medial preoptic nucleus lordosis regulating circuit: a role for GABAB receptors. *Hormones and Behavior* 2013; 64(1):136-43.

Christensen A and Micevych P. A novel membrane estrogen receptor activated by STX induces female sexual receptivity through an interaction with mGluR1a. *Neuroendocrinology* 2013; 97(4):363-8.

Christensen A and Micevych P. CAV1 siRNA reduces membrane estrogen receptor- α levels and attenuates sexual receptivity. *Endocrinology* 2012; 153(8):3872-7.

Micevych P and **Christensen A**. Membrane-initiated estradiol actions mediate structural plasticity and reproduction. *Frontiers in Neuroendocrinology* 2012; 33(4):331-41.

Christensen A, Bentley G, Cabrera R, Ortega H, Perfito N, Wu T, Micevych P. Hormonal regulation of reproduction. *Hormones and Metabolic Research* 2012; 44(8):587-91.

Christensen A, Dewing P, Micevych P. Membrane-initiated estradiol signaling induces spinogenesis required for female sexual receptivity. *Journal of Neuroscience* 2011; 31(48):17583-9.

Micevych P, Kuo J, **Christensen A**. Physiology of membrane oestrogen receptor signalling in reproduction. *Journal of Neuroendocrinology* 2009; 21(4):249-56.

Dewing P, **Christensen A**, Bondar G, Micevych P. PKC signaling in the hypothalamic arcuate nucleus regulates sexual receptivity in female rats. *Endocrinology* 2008; 149(12): 5934-5942.

Dewing P, Boulware M, Sinchak K, **Christensen A**, Mermelstein P., Micevych P. Membrane estrogen receptor-alpha interactions with metabotropic glutamate receptor 1a modulate female sexual receptivity in rats. *Journal of Neuroscience* 2007; 27(35): 9294-9300.

Chaban V, **Christensen A**, Wakamatsu M, McDonald M, Rapkin A, McDonald J, Micevych P. The same dorsal root ganglion neurons innervate uterus and colon in the rat. *NeuroReport* 2007; 18(3):209-212.

Professional Memberships

Society for Neuroscience	2006 – Present
Organization for the Study of Sex Differences	2018 – Present
Alzheimer's Association	2019 – Present