

Curriculum Vitae

Pamela J. McMillan, Ph.D.

pammcm@u.washington.edu

Education

Ph.D. Biochemistry 1994
Department of Biochemistry and Molecular Biology
University Arkansas Medical Sciences, Little Rock, AR

B.A. Biology 1988
Hendrix College, Conway, AR

Experience

2004-present
Research Assistant Professor, Department of Psychiatry and Behavioral Sciences
University of Washington

2002-2004
Acting Assistant Professor, Department of Psychiatry and Behavioral Sciences
University of Washington

1998-2002
Acting Instructor, Department of Psychiatry and Behavioral Sciences
University of Washington

1998-1998
Postdoctoral Research Fellow, Department of Psychiatry and Behavioral Sciences
University of Washington

1994-1998
Postdoctoral Research Fellow, Department of Pharmacology
University of Washington

1988-1989
Research Technician, Department of Biochemistry and Molecular Biology
University of Arkansas Medical Sciences

Honors and Fellowships

Golden Eagle Award for Alzheimer's research, "Effect of Alzheimer's Disease PS1 Mutations on the Expression of Insulin Degrading Enzyme" 2001

Postdoctoral Fellowship 1997-1998, Genetic Approaches to Aging Training Grant

Postdoctoral Fellowship 1995-1997, Reproductive Biology Training Grant

Funding

Royalty Research Fund, "Characterization of neuronal changes that underlie dysregulation of prefrontal cortex in a mouse model of PTSD" 2008-2010

Alzheimer's Association New Investigator Research Grant, "Effect of ApoE on IDE and insulin-signaling in Alzheimer's Disease" 2004-2006

UWADRC and Nathan Shock Biology of Aging Pilot Grant, "Neurotrophic Effects of Estrogen in Cholinergic Neurons" 1998-1999

Society Memberships

Society for Neuroscience, 1995-present

Seattle Institute for Biomedical and Clinical Research, 2005-present

Publications

McMillan, P.J., Tondravi, M.M. and Bannon, G.A. (1993). *rseB*, a chromosomal locus that affects the stability of a temperature-specific surface protein mRNA in tetrahymena thermophila. Nucleic Acids Res. 21:4356-4362.

McMillan, P.J., Stanley, J.S. and Bannon, G.A. (1995). Evidence for the requirement of protein synthesis and protein kinase activities in the temperature-regulated stability of a tetrahymena surface protein mRNA. Nucleic Acids Res. 23:942-948.

McMillan, P.J., Singer, C.A. and Dorsa, D.M. (1996). The effects of ovariectomy and estrogen replacement on *trkA* and choline acetyltransferase mRNA expression in the basal forebrain of the adult female sprague dawley rat. J. Neuroscience 16:1860-1865.

McMillan, P.J., Leverenz, J.B., Poorkaj, P., Schellenberg, G.D. and Dorsa, D.M. (1996). Neuronal expression of STM2 mRNA in the human brain is reduced in Alzheimer's disease. J. Histochem and Cytochem 44:1215-1222.

Singer, C.A., **McMillan, P.J.**, Dobie, D.J. and Dorsa, D.M. (1997). Effects of estrogen replacement on choline acetyltransferase and *trkA* mRNA expression in the basal forebrain of the aged rat. Brain Research 789:343-346.

McMillan, P.J. and Dorsa, D.M. (1999). Estrogen actions in the central nervous system. Current Opinion in Endocrinology and Diabetes 6:33-37.

McMillan, P.J., Leverenz, J.B., and Dorsa, D.M. (2000). Specific downregulation of presenilin-2 gene expression is prominent during early stages of sporadic late-onset Alzheimer's disease. Molecular Brain Research 78:138-145.

McMillan, P.J., LeMaster, A., and Dorsa, D.M. (2002). Tamoxifen enhances choline acetyltransferase mRNA expression in rat basal forebrain cholinergic neurons. Molecular Brain Research 103:140-145.

Cook, D.G., Leverenz, J.B., **McMillan, P.J.**, Kulstad, J.J., Ericksen, S., Roth, R.A., Schellenberg, G.D., Jin, L.W., Kovacina, K.S. and Craft, S. (2003) Reduced Hippocampal Insulin Degrading Enzyme in Late Onset Alzheimer's Disease is Associated with the Apolipoprotein E- ϵ 4 Allele. American Journal of Pathology 162:313-319.

McMillan PJ, Peskind E, Raskind MA and Leverenz JB. (2004) Increased galanin receptor occupancy in Alzheimer's disease. Neurobiology of Aging 25:1309-14.

McMillan PJ, Wilkinson C, Raskind MA, Peskind E, Greenup, L and Leverenz JB. (2004) Chronic Cortisol Exposure Promotes the Development of a GABAergic Phenotype in the Primate Hippocampus. Journal of Neurochemistry 91:843-51.

Kulstad, J.J., **McMillan, P.J.**, Leverenz, J.B., Peskind, E.R., Cook, D.G. and Craft, S. (2005) Chronic Glucocorticoid Administration Reduces Insulin Degrading Enzyme Levels in Frontal Cortex and Hippocampus in the Aged Macaque. Journal of Neuropathology and Experimental Neurology 64:139-46.

Pedersen, W.A., **McMillan, P.J.**, Kulstad, J.J., Leverenz, J.B., Craft, S., Haynatzki, G.R. (2006) Rosiglitazone attenuates glucocorticoid-induced learning and memory deficits in Tg2576 Alzheimer mice. Experimental Neurology 199:265-273.

James B. Leverenz, Imran Umar, Qing Wang, Thomas J. Montine, **Pamela J. McMillan**, Debby W. Tsuang, Jinghua Jin, Catherine Pan, Jenny Shin, David Zhu, and Jing Zhang (2006) Proteomic identification of novel proteins in cortical Lewy bodies. Brain Pathology 17:139-45.

Pamela J. McMillan, Elena Korvatska, Parvoneh Poorkaj, Zana Evstafjeva, Linda Robinson, Lynne Greenup, James Leverenz, Gerard Schellenberg and Ian D'Souza (2008) Tau isoform regulation is region and cell-specific in mouse brain. Journal of Comparative Neurology, 511:788-803.

Abstracts

McMillan, P.J., Singer, C.A. and Dorsa, D.M.: Effects of ovariectomy and estrogen replacement on trkA and choline acetyltransferase mRNA expression in the rat basal forebrain. Soc. Neurosci. Abst., Vol 21, Part 1, p. 808, 1995.

McMillan, P.J., Leverenz, J.B., Poorkaj, P., Schellenberg, G.D. and Dorsa, D.M.: Neuronal expression of STM2 mRNA in the human brain is reduced in Alzheimer's disease. Soc. Neurosci. Abst., Vol. 22, Part 3, p. 1894, 1996.

McMillan, P.J. and Dorsa, D.M.: Interaction of estrogen and NGF on the function of cholinergic neurons. Soc. Neurosci. Abst., Vol. 24, Part 2, p. 703.9, 1998.

McMillan, P.J., Leverenz, J.B., and Dorsa, D.M.: Specific downregulation of presenilin-2 gene expression is prominent during early stages of sporadic late-onset Alzheimer's disease. Soc. Neurosci. Abst., 2000.

Kulstad, J.J., Cook, D., Watson, G.S., Asthana, S., Peskind, E.R., Wilkinson, C.W., **McMillan, P.J.** and Craft, S.: Acute effects of insulin and cortisol on insulin degrading enzyme levels. Soc. Neurosci. Abst., 965.10, 2001.

McMillan, P.J., Cook, D.G., Leverenz, J.B., Kulstad, J.J., Ericksen, S., Roth, R.A., Schellenberg, G.D., Jin, L.W., Kovacina, K.S. and Craft, S. (2002) Reduced Hippocampal Insulin Degrading Enzyme in Late Onset Alzheimer's Disease is Associated with the Apolipoprotein E- ϵ 4 Allele. 8th International Conference on Alzheimer's Disease and Related Disorders Abst. 1464, 2002.

McMillan, P.J., Wilkinson, C.W., Raskind, M.A., Peskind, E.R. and Leverenz, J.B. Effect of chronic glucocorticoid treatment on Calbindin-D28k expression in the non-human primate hippocampus. Soc. Neurosci. Abst. 470.18, 2002.

Kulstad, J.J., Leverenz, J.B., **McMillan, P.J.**, Peskind, E.R., Cook, D.G. and Craft, S. Chronic Glucocorticoid Administration Reduces Insulin Degrading Enzyme Levels in Frontal Cortex and Hippocampus in the Aged Macaque. Soc Neurosci Abst. 688.19, 2002.

McMillan P.J., Wilkinson C., Raskind M.A., Peskind E., Greenup, L., and Leverenz J.B. Effects of chronic cortisol exposure on GAD and BDNF expression in the primate hippocampus. Soc. Neurosci. Abst. 614.17, 2003.

McMillan P.J., Leverenz, J.B., Bird, T.D., Schellenberg, G.D. and Craft, S. (2004) Insulin Degrading Enzyme Immunostaining is Decreased in the Hippocampus of Familial Alzheimer's Disease Subjects with Presenilin 1 Mutations. 9th International Conference on Alzheimer's Disease and Related Disorders, Neurobiology of Aging 25: S556.

McMillan P.J., Wilkinson C., Raskind M.A., Peskind E., Greenup, L., and Leverenz J.B. Effect of Chronic Glucocorticoid Exposure on the Expression of Synaptic Markers in the Primate Hippocampus. Soc. Neurosci. Abst. 999.11, 2004.

McMillan P.J., J.B. Leverenz, I. D'Souza, J. L. Greenup, Z. Evstafjeva, P. Poorkaj, and G.D. Schellenberg. Immunohistochemical Analysis of Mouse and Human 3R and 4R-Tau in the Hippocampus and Frontal Cortex. Soc. Neurosci. Abst. 888.10, 2007.

Olson V.G., Rocket H., Reh R., Redila V., Chun L., Raskind M., **McMillan P.**, and Szot P. Divergent neuroadaptations in noradrenergic signaling underlie resilience and vulnerability in an animal model of PTSD. Soc. Neurosci. Abst. 845.24, 2008.