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CURRICULUM VITAE
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Education:

Ph.D. Neuroscience, University of Colorado at Boulder, 2008
M.A. Psychology, University of Colorado at Boulder, 2004
B.A. Philosophy, Cum Laude, University of Vermont, 2000

Research Experience:

2008- present **Postdoctoral Fellow**, Picower Institute for Learning and Memory,
Massachusetts Institute of Technology, Advisor Dr. Susumu Tonegawa
2002-2008 **Graduate Student**, Department of Psychology and Center for Neuroscience,
University of Colorado at Boulder, Advisor Dr. Jerry Rudy
2000-2002 **Laboratory Technician**, Dr. Steven Maier and Dr. Linda Watkins,
Department of Psychology and Center for Neuroscience, University of
Colorado at Boulder
1999-2000 **Research Assistant**, Dr. Kentaro Mirakami, Department of Biology,
University of Vermont
1996-1999 **Research Assistant**, Dr. Lynn Schneider, Department of Biology,
University of Vermont

Honors and Awards:

1995 Eagle Scout, Boy Scouts of America

Publications:

Biedenkapp JC, Rudy JW. (2008) Hippocampal and extrahippocampal systems compete for control of contextual fear: role of ventral subiculum and amygdala. *Learn Mem.* Dec 30; 16(1):38-45.

Biedenkapp JC, Rudy JW. (2007) Context preexposure prevents forgetting of a contextual fear memory: implication for regional changes in brain activation patterns associated with recent and remote memory tests. *Learn Mem.* Mar 8; 14(3):200-3.

Holguin, A., Frank, M. G., Biedenkapp, J. C., Nelson, K., Lippert, D., Watkins, L.R., Rudy, J. W., & Maier, S. F. (2006) Characterization of the temporospatial effects of chronic bilateral intrahippocampal cannulae on interleukin-1 beta. *Journal of Neuroscience Methods*. 161(2):265-272.

Bolding K and Biedenkapp J. (2006) What can immediate early gene expression tell us about spatial memory retrieval? *J Neurosci. Journal Club* 26(6): 1659-1660.

Rudy JW, Biedenkapp JC, Moineau J, Bolding, K. (2006) Anisomycin and the Reconsolidation Hypothesis. *Learn Mem*. 13(1): 1-3.

Rudy JW, Biedenkapp JC, O'Reilly RC. (2005) Prefrontal cortex and the organization of recent and remote memories: an alternative view. *Learn Mem*. 12(5): 445-6.

Bilbo, SD, Biedenkapp, JC, Der-Avakian, A, Watkins, LR, Rudy, JW & Maier, SF. (2005) Neonatal infection-induced memory impairment following lipopolysaccharide in adulthood is prevented via caspase-1 inhibition. *J Neurosci*, 25(35), 8000-8009.

Barrientos RM, Higgins EA, Biedenkapp JC, Sprunger DB, Wright-Hardesty KJ. (2005) Peripheral infection and aging interact to impair hippocampal memory consolidation. *Neurobiol Aging*. May 10.

Frank MG, Barrientos RM, Biedenkapp JC, Rudy JW, Watkins LR, Maier SF. (2005) mRNA up-regulation of MHC II and pivotal pro-inflammatory genes in normal brain aging. *Neurobiol Aging*. May 9.

Milligan ED, Zapata V, Chacur M, Schoeniger D, Biedenkapp J, O'Connor KA, Verge GM, Chapman G, Green P, Foster AC, Naeve GS, Maier SF, Watkins LR. (2004) Evidence that exogenous and endogenous fractalkine can induce spinal nociceptive facilitation in rats. *Eur J Neurosci*. 20(9): 2294-302.

Biedenkapp JC, Rudy JW. (2004) Context memories and reactivation: constraints on the reconsolidation hypothesis. *Behav Neurosci*. 118(5): 956-64.

Holguin A, O'Connor KA, Biedenkapp J, Campisi J, Wieseler-Frank J, Milligan ED, Hansen MK, Spataro L, Maksimova E, Bravmann C, Martin D, Fleshner M, Maier SF, Watkins LR. (2004) HIV-1 gp120 stimulates proinflammatory cytokine-mediated pain facilitation via activation of nitric oxide synthase-I (nNOS). *Pain*; 110(3): 517-30.

O'Connor KA, Hansen MK, Rachal Pugh C, Deak MM, Biedenkapp JC, Milligan ED, Johnson JD, Wang H, Maier SF, Tracey KJ, Watkins LR. (2003) Further characterization of high mobility group box 1 (HMGB1) as a proinflammatory cytokine: central nervous system effects. *Cytokine*. Dec 21; 24(6):254-65.

Campisi J, Hansen MK, O'Connor KA, Biedenkapp JC, Watkins LR, Maier SF, Fleshner M. (2003) Circulating cytokines and endotoxin are not necessary for the activation of the sickness or corticosterone response produced by peripheral *E. coli* challenge. *J Appl Physiol*. Nov; 95(5): 1873-82.

Milligan ED, Twining C, Chacur M, Biedenkapp J, O'Connor K, Poole S, Tracey K, Martin D, Maier SF, Watkins LR. (2003) Spinal glia and proinflammatory cytokines mediate mirror-image neuropathic pain in rats. *J Neurosci.* Feb 1; 23(3): 1026-40.

Presentations and Published Abstracts:

Joseph C. Biedenkapp, Charles E. Murphy and Jerry W. Rudy. Gene expression in the hippocampus across light-dark cycle and paired vs. isolated housing conditions: Implications for contextual fear memory formation. Presented at the Society for Neuroscience Annual Meeting, San Diego, 2007.

Joseph C. Biedenkapp, Karli Wright-Hardesty, Patrica Matus-Amat and Jerry Rudy
A role for the ventral subiculum in mediating the competition between the hippocampus and neocortex for context-shock associations. Presented at the Society for Neuroscience Annual Meeting, Atlanta, 2006.

Joseph C. Biedenkapp, Dan Lopez-Paniagua, David Sprunger and Jerry W. Rudy.
Generalization test reveals rapid forgetting of a hippocampus-dependent contextual-fear memory. Presented at the Society for Neuroscience Annual Meeting, Washington, DC, 2005.

Bilbo, SD, Biedenkapp, JC, Watkins, LR, Rudy, JW, Maier, SF. Neonatal infection-induced memory impairment following lipopolysaccharide in adulthood is prevented via caspase-1 inhibition. Presented at the Society for Neuroscience Annual Meeting, Washington, DC, 2005.

A Holguin, J Biedenkapp, D Sprunger, K Nelson, K Wright, LR Watkins, JW Rudy, SF Maier
LPS-induced an exaggerated Interleukin-1 response several weeks after intracranial surgery. Presented at the Society for Neuroscience Annual Meeting, San Diego, 2004.

MG Frank*, M Baratta, JC Biedenkapp, LR Watkins, SF Maier. Inescapable Shock Induces Glial Activation in Hypothalamus and Hippocampus. Presented at the Society for Neuroscience Annual Meeting, San Diego, 2004.

Biedenkapp, J.C., Wright-Hardesty, K. F., Watkins, L.R., Maier, S.F. and Rudy, J.W.
Peripheral Injection of the Live Bacteria *E.coli* Interferes with the Maintenance of a Contextual-Fear Memory. Presented at the Society for Neuroscience Annual Meeting, San Diego, 2004.

Biedenkapp, J.C., Barrientos, R.M., Higgins, E.A., Wright-Hardesty, K. F., Linda R. Watkins, Steven F. Maier, and Rudy, J.W. Do Memories for Context Undergo Cellular Reconsolidation? Presented at the Society for Neuroscience Annual Meeting, New Orleans, 2003.

Professional Memberships:

The Society for Neuroscience

The PsychoNeuroImmunology Research Society

Teaching Experience:

2008 Instructor, *Biopsychology*, University of Colorado at Boulder
2006 Teaching Assistant, *Psychology of Learning*, University of Colorado at Boulder
2002 Teaching Assistant, *Psychology of Learning*, University of Colorado at Boulder
2002 Teaching Assistant, *Perception*, University of Colorado at Boulder
2001 Teaching Assistant, *Biopsychology*, University of Colorado at Boulder
2000 Tutor, *Logic*, University of Vermont

Theses:

Ph.D. Thesis, University of Colorado at Boulder, 2008

An examination of the functions of the ventral subiculum in contextual fear memory formation.

Master's Thesis, University of Colorado at Boulder, 2004

Retrieved memories for context do not require cellular reconsolidation in the hippocampus for long-term maintenance.

References:

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