

Karli K. Watson

EDUCATION AND TRAINING

Research Faculty <i>University of Colorado at Boulder</i>	September 2014 - Present
Senior Research Associate <i>Duke University</i>	July 2012 – July 2014 Durham, NC
Post-doctoral Fellow Mentor: Michael Platt <i>Duke University</i>	March 2006 – July 2012 Durham, NC
Ph.D., Neurobiology Mentor: John Allman <i>California Institute of Technology</i>	Sept 1999 - March 2006 Pasadena, CA
B.A., Biophysics <i>Swarthmore College</i>	August 1993-June 1997 Swarthmore, PA

PEER-REVIEWED PUBLICATIONS

Watson, K.K., Li, D, Brent, L.J.N., Horvath, J.E., Gonzalez-Martinez, J., Ruiz-Lambides, A.V., Robinson, A.G., Skene, J.H.P, Platt M.L.
Genetic influences on social attention in free-ranging rhesus macaques.
Animal Behaviour (2015). **103**: 267-273.

Pearson JM, **Watson K.K.**, Platt ML
Decision making: The neuroethological turn.
Neuron (2014). **82**:950-965.

Gariépy J-F, **Watson K.K.**, Du E, Xie DL, Erb J, Amasino D, Platt ML
Social learning in humans and other animals.
Frontiers in Neuroscience (2014). **8**.

Pearson, J.M, **Watson, K.K.**, Klein, J.T. , Ebitz, R.B., and Platt, M.L.
Individual differences in social information gathering revealed through Bayesian hierarchical models.
Frontiers in Decision Neuroscience (2013). Epub.

Ebitz, R.B., **Watson, K.K.**, Platt M.L.
Oxytocin blunts social vigilance in the rhesus macaque.
Proceedings of the National Academy of Sciences (2013). **110**:11630-11635.

Chang, S.W.C., Brent, L.J.N., Adams, G.K., Klein, J.T., Pearson, J.M., **Watson, K.K.**, and Platt, M.L.
Neuroethology of primate social behavior
Proceedings of the National Academy of Sciences (2013). **110**:10387-10394.

Watson, K.K. and Platt, M.L.
Social signals in primate orbitofrontal cortex.
Current Biology (2012). **22**(23): 2268:2273.

Watson, K.K. and Platt, M.L.
Of mice and monkeys: using non-human primate models to bridge mouse-and human based investigations of autism spectrum disorders.
Journal of Neurodevelopmental Disorders (2012). **4**(1): 21.

Adams GK, **Watson KK**, Pearson J, Platt ML.
Neuroethology of decision-making.
Current Opinions in Neurobiology (2012). **22**(6): 982-989.

Chang, S.W.C., Barter, J.W., Ebitz, R.B., **Watson, K.K.**, and Platt, M.L.
Inhaled oxytocin amplifies both vicarious reinforcement and self reinforcement in rhesus macaques (Macaca mulatta).
Proceedings of the National Academy of Sciences (2012). **109**(3): 959-964.

Watson, K.K., Ghodasra, J., Furlong, M.A., and Platt, M.L.
Visual preferences for sex and status in female rhesus macaques.
Animal Cognition (2011). **14** (6).

Zucker N.L., Moskovich A., Vinson M., and **Watson K.K.**
Emotions and empathic understanding: Capitalizing on relationships in those with eating disorders.
In: A Collaborative Approach to Eating Disorders (2011). J. Alexander and J. Treasure, eds. (London: Routledge).

Watson, K.K., Werling, D., Zucker, N.L., and Platt, M.L.
Altered social reward in anorexia nervosa.
Frontiers in Psychopathology (2010). Epub.

Platt, M.L., **Watson, K.K.**, Hayden, B.Y., Shepherd, S.V., and Klein, J.T.
Neuroeconomics: Implications for Understanding the Neurobiology of Addiction.
In: Advances in the Neuroscience of Addiction (2010). C.M. Kuhn, and G.F. Koob, eds. (Boca Raton, CRC Press).

Watson, K.K., Shepherd, S.V., and Platt, M.L.
Neuroethology of pleasure.
In: Pleasures of the Brain (2010). M.L. Kringelbach, and K.C. Berridge, eds. (Oxford, Oxford University Press).

Watson, K.K., Ghodasra, J.H., and Platt, M.L.
Serotonin transporter genotype modulates social reward and punishment in rhesus macaques.
PLoS ONE (2009). **4**, e4156

Watson, K.K., and Platt, M.L.

Neuroethology of reward and decision making.
Philosophical Transactions of the Royal Society B-Biological Sciences (2008). 363, 3825-3835.

Watson, K.K., and Platt, M.L.
Neuroethological perspective.
In Encyclopedia of Neuroscience (2008). L.R. Squire, ed. (Oxford, Academic Press).

Watson, K.K.
Evolution, risk, and neural representation.
In: Strategies for Risk Communication: Evolution, Evidence, Experience (2008). W.T. Tucker, S. Ferson, and A.M. Finkel, eds. (Oxford, Blackwell Publishing), pp. 8-12.

Watson, K.K., Matthews, B.J., and Allman, J.M.
Brain activation during sight gags and language-dependent humor.
Cerebral Cortex (2007). 17, 314-324.

Watson, K., and Allman, J.
Neuroanatomy of the von Economo neurons, a recently evolved neuronal population in great apes and humans.
In: The Evolution of Primate Nervous Systems (2007). J.H. Kaas, and T.M. Preuss, eds. (Oxford, Elsevier).

Watson, K.K., Jones, T.K., and Allman, J.M.
Dendritic architecture of the von Economo neurons.
Neuroscience (2006). 141, 1107-1112.

Allman, J.M., **Watson, K.K.**, Tetreault, N.A., and Hakeem, A.Y.
Intuition and autism: a possible role for Von Economo neurons.
Trends in Cognitive Sciences (2005). 9, 367-373.

Allman, J., Hakeem, A., and **Watson, K.**
Two phylogenetic specializations in the human brain.
Neuroscientist (2002). 8, 335-346

McBride, S.M., Giuliani, G., Choi, C., Krause, P., Correale, D., **Watson, K.**, Baker, G., Siwicki, K.K.
Mushroom body ablation impairs short-term memory and long-term memory of courtship conditioning in Drosophila melanogaster.
Neuron (1999). 24, 967-977.

MANUSCRIPTS IN PREPARATION OR UNDER REVIEW

Watson K.K., Madlon-Kay, S., Platt, M.L, Ruiz-Lambides, A.R., Gonzalez, J., Brent, L.J.N.
Adiposity is heritable in free-ranging rhesus macaques
Under review in American Journal of Primatology.

Gariépy J.-F., Chang S.W.C., **Watson K.K.**, Barrack D., Utevsky A., Sundararajan J., Xie D., Du E., Fei, S., Platt M.L.
Neuroscientist's closest friends.
Under review in Neuroscience.

Li, D., **Watson K.K.**, Platt, M.L, Ruiz-Lambides, A.R., Gonzalez, J., Brent, L.J.N.
Sex differences in rhesus macaque social vigilance.
In prep.

Watson, K.K., Powell, F, Zucker, N.L. and Platt, M.L.
Heightened disgust in anorexia nervosa.
In prep.

Winecoff AA, **Watson K.K.**, Gaddis K, Buhi L, Platt M, Huettel SA, Zucker N.L.
Neural mechanisms of value and social processing in anorexia nervosa.
In prep.

SELECTED POSTERS

Watson, K.K., F. Powell, N.L Zucker, and Platt, M.L. (2012)
Anorexia nervosa impacts functional connectivity of the anterior insula.
Society for Neuroscience Annual Meeting (New Orleans, LA).

Watson, K.K., D. Li, P. Skene, L. Brent, and Platt, M.L.(2012).
Serotonin-related genotypes influence social vigilance in free-ranging primates.
Society for Social Neuroscience Annual Meeting (New Orleans, LA).

Watson, K.K., N.L Zucker, and Platt, M.L. (2011).
Heightened disgust in anorexia nervosa.
Society for Neuroscience Annual Meeting (Washington, D.C.).

Watson, K.K., N.L Zucker, D.M. Werling and Platt, M.L. (2010).
Altered social reward and attention in anorexia nervosa.
Society for Neuroscience Annual Meeting (San Diego, CA).

Watson, K.K., and Platt, M.L. (2009).
Social reward encoding in primate orbitofrontal cortex.
Society for Neuroscience Annual Meeting (Chicago, IL).

Watson, K.K., and Platt, M.L. (2008).
Orbitofrontal cortex neurons encode both social and nonsocial rewards.
Society for Neuroscience Annual Meeting (Washington, D.C.).

Watson, K.K., and Platt, M.L. (2007).
Rapid tryptophan depletion alters valuation of social images in the macaque monkey.
Neural Systems of Social Behavior (Austin, TX).
Cognitive Neuroscience Society Annual Meeting (New York, NY).

Watson, K.K., and Platt, M.L. (2007).
Serotonin signaling regulates social vigilance in rhesus macaques.
Society for Neuroscience Annual Meeting (San Diego, CA).

Watson, K.K., and Platt, M.L. (2006).

Acute tryptophan depletion alters valuation of both social and reproductive images.
Society for Neuroeconomics Annual Meeting (Park City, UT).

INVITED TALKS

University of Colorado, Boulder
Boulder, Colorado. February 2014.

BIOQUAL, Inc.
Rockville, Maryland. November 2013.

Temple University.
Philadelphia, Pennsylvania. October 2013.

International Behavioral Neuroscience Society.
Dublin, Ireland. June 2013.

Oregon National Primate Research Center.
Beaverton, OR. January 2013.

CNS Summit.
Boca Raton, Florida. November 2012.

Virginia Tech Carilion Research Institute
Roanoke, Virginia. May 2012.

University of California, Los Angeles.
Los Angeles, California. April 2011.

The New York Academy of Sciences: Critical Contributions of the Orbitofrontal Cortex to Behavior.
New York, New York, March 2011.

University of Wisconsin, Madison.
Madison, Wisconsin. February 2011.

Ninth International Congress for Neuroethology
Salamanca, Spain, August 2010.

Batsheva Seminar on Reward and Decision Making in the Brain
Hebrew University, Jerusalem, Israel, February 2010

Society for Neuroeconomics Annual Meeting
Evanston, IL, October 2009.

Society for Neuroscience Annual Meeting
San Diego, CA, October 2007.

The New York Academy of Sciences: Strategies for Risk Communication
Montauk, NY. June 2006.

AWARDS

- 2012 Travel Award, 2012 Annual meeting for the Society for Social Neuroscience
- 2009 Recipient, Davis Foundation Postdoctoral Fellowship Program in Eating Disorders Research. Duke University.
- 2007 Recipient, Cure Autism Now Foundation Young Investigator Grant. Duke University.
- 2007 Recipient, National Alliance for Autism Research Postdoctoral Fellowship Award (declined). Duke University.
- 2006 Recipient, Duke Training Grant for Translational Neuroscience. Duke University.
- 2004 With John Allman, awarded grant from The Swartz Foundation. "The Spindle Cells of Human Cortex." California Institute of Technology.
- 2002 Annual award for excellence in teaching, awarded by the Biology Undergraduate Student Advisory Committee. California Institute of Technology.
- 2002 With John Allman, awarded grant from the W.M. Keck Foundation. "Anatomical and Functional Studies of the Anterior Cingulate Cortex (Brodmann's area 24) and Frontal Polar Cortex (Brodmann's area 10) in the Human Brain." California Institute of Technology.
- 2001 Annual award for excellence in teaching, awarded by the Biology Undergraduate Student Advisory Committee. California Institute of Technology.

TEACHING EXPERIENCE

- 9/06-present *Undergraduate and Graduate Student Mentor.*
Mentored numerous graduate students until they gained proficiency in non human primate recording. Also mentored 12 undergraduates, 11 of whom are enrolled in, or applying to, medical school or advanced degree research programs.
- 3/04-6/04 *Instructor.* California Institute of Technology.
Biology 23. Mental States of Anthropoid Primates.
Developed curriculum, designed and delivered lectures, moderated discussion, and assigned grades of a group of twelve graduate and undergraduate level students. Was sole instructor for the course.
- 9/01-12/01 and *Teaching assistant.* California Institute of Technology,
Behavior of Mammals. Biology.

- 9/03-12/03 Helped design curriculum, designed website, graded work, and moderated classroom discussion. Professor: John Allman
- 9/00-12/00 *Teaching assistant.* California Institute of Technology,
and Central Mechanisms of Perception. Biology.
9/02-12/02 Helped design curriculum, designed website, graded work, and moderated classroom discussion. Professor: John Allman
- 3/00-6/00 *Teaching assistant.* California Institute of Technology,
Central Nervous System Laboratory. Computation and Neural Systems. Taught and oversaw surgeries and *in vivo* recording from rat cerebellum. Professor: Jim Bower.