

**CURRICULUM VITAE**  
**6/1/15**

**NAME:** James K. Rilling, Ph.D.

**BIRTH DATE:** August 3, 1970

**CURRENT TITLES AND AFFILIATIONS:**

Associate Professor of Anthropology  
Associate Professor of Psychiatry and Behavioral Sciences  
Emory University, 2009 – present

Affiliate Scientist, Division of Psychobiology  
Yerkes Regional Primate Research Center, Emory University, 2003 - present

Faculty member, Center for Behavioral Neuroscience, Emory University, 2003 – 2010

Faculty member, Center for Translational Social Neuroscience, 2011 - present

**CITIZENSHIP:** U.S.A.

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**OFFICE ADDRESS:** Department of Anthropology  
Emory University  
Anthropology Building  
1557 Pierce Drive  
Atlanta, GA 30322

**E-MAIL ADDRESS:** jrillin@emory.edu

**EDUCATION:**

1992, B.S., Zoology, University of Wisconsin-Madison  
1996, M.A., Anthropology, Emory University, Atlanta, GA  
1998, Ph.D., Anthropology, Emory University, Atlanta, GA

**PREVIOUS ACADEMIC POSITIONS:**

Research Fellow, Department of Psychiatry and Behavioral Sciences  
Emory University, 1998-2001  
Research Fellow, Center for the Study of Brain, Mind and Behavior  
Princeton University, 2001 – 2003

## **HONORS AND AWARDS:**

Phi Beta Kappa, University of Wisconsin-Madison, 1992  
Markey Center for Neurological Sciences Fellowship for Post-Doctoral Research, 1998 - 2000  
National Institutes of Mental Health National Research Service Award for Individual Post-doctoral Research (MH12736 F32), 2000 – 2002  
Young Investigator Award, International College of Neuropharmacology, 2004  
Visiting Senior Research Fellow, Jesus College, University of Oxford, Fall, 2009  
Templeton Positive Neuroscience Award, Fall, 2010  
Winship Distinguished Research Professor, Emory University, Fall, 2014 - present

## **SOCIETY MEMBERSHIPS:**

Society for Neuroscience  
Organization for Human Brain Mapping  
Corresponding Member, UCSD/Salk Center for Academic Research and Training in Anthropogeny (CARTA)

## **RESEARCH FOCUS:**

I am interested in 1) using functional neuroimaging techniques to explore the neurobiological basis of human and non-human primate social cognition and 2) comparison of human and non-human primate brain anatomy and function in order to identify human brain specializations and learn about human brain evolution.

## **GRANT SUPPORT:**

### **Current Support**

National Institutes of Mental Health R01, “Vasopressin Effects on Human Affiliation”, (Rilling and Thompson, Co-PIs), \$896,652 (Total Direct Costs), 9/1/10 – 8/31/15.

Templeton Foundation, “The Prosocial Brain: Evolution of the Human Capacity for Empathy, Compassion and Cooperation”, Co-leader of projects 1 and 3 (Elliott Albers, PI), \$2,941,083 (Total Direct Costs), 7/1/13 – 6/30/16.

National Institutes of Mental Health, “Silvio O. Conte Center for Oxytocin and Social Cognition”, Co-leader of project 4 (Larry Young, PI), \$5,993,729 (Total Direct Costs), 4/1/2013-8/31/2018.

National Institutes of Child Health and Development R21, “Neurobiological bases of paternal nurturance”, (Rilling PI), \$313,709 (Total Direct Costs), 4/15/14 – 3/31/16.

National Institute of Mental Health R21, “OXTR Methylation as a Potential Modulator of Intranasal OT Influences in Humans”, (Rilling PI), \$125,000 (Total Direct Costs), 9/30/14-9/29/15.

### **Past Support**

L.S.B. Leakey Foundation, “Organization of the Human Brain in Comparative Perspective Using Magnetic Resonance Imaging” (Rilling, PI), \$7,500, 1/1/97-1/1/99

NIMH NRSA, “Neural correlates of aggression in rhesus monkeys” (Rilling, PI MH12736 F32), 2000 – 2002

Center for Behavioral Neuroscience, “Comparative Diffusion Tensor Imaging and Magnetic Resonance Spectroscopy in monkeys, apes and humans”, (Rilling, PI), \$22,000, 1/1/04 - 12/31/05.

University Research Committee, “Comparative Diffusion Tensor Imaging in monkeys, apes and humans”, (Rilling, PI), \$30,000, 1/01/06 – 12/31/06.

National Science Foundation, “Mapping the Social Brain with fMRI and interactive games”, (Rilling, PI), \$294,025, 07/01/05 - 06/30/09.

National Institute on Aging/National Institutes of Health, “Evolution of aging and dementia in female primates”, (Herndon, PI), \$7,960,849 (Total Direct Costs), 4/15/07 – 9/31/12.

Templeton Positive Neuroscience Award, “Biological basis of individual variation in paternal nurturance”, (Rilling and Thompson, Co-PIs), \$223,818 (Total Direct Costs), 11/1/10 – 4/30/13.

National Institute of Mental Health R01, “Neurobiological and genetic correlates of cooperative behavior”, (Rilling, PI), \$950,000, plus \$50,000 supplement (Total Direct Costs), 7/1/09-6/30/14.

### **FORMAL TEACHING:**

#### Undergraduate Teaching:

- Anthropology 210: “Human Biology: A Life Cycle Approach”, Instructor, Spring, 2004, Spring, 2005, Spring, 2007, Spring, 2009, Spring, 2011, Spring 2013
- Anthropology 316/ Neuroscience and Behavioral Biology 316: “Evolution of Human Brain and Mind”, Instructor, Fall, 2003, Fall, 2004, Spring, 2015
- Anthropology 317/ Neuroscience and Behavioral Biology 317: “Human Social Neuroscience”, Instructor, Fall, 2006, Fall, 2008, Fall, 2010, Fall, 2011
- Interdisciplinary Biological Sciences (IBS 703R): “Human Social Neuroscience”, Co-Instructor, Spring, 2005

- Anthropology 200/ Neuroscience and Behavioral Biology 201: “Foundations of Behavior”, Co-Instructor, Spring 2006, Spring 2008, Spring 2010, Spring, 2012, Spring, 2014
- Anthropology 385: “Anthropology of Fatherhood”. Instructor, Fall, 2012, Fall, 2014.

Graduate Teaching:

- Anthropology 520R, “Biocultural Seminar”, Fall, 2005.
- Anthropology 555: Research Seminar in Biological Anthropology, Instructor of Record, Fall, 2013.
- Psychology 730R: fMRI Research Group, Co-instructor, Spring, 2004, Fall, 2004, Spring, 2005, Fall 2005, Spring 2006, Fall 2006, Spring 2007, Spring, 2008, Fall, 2008, Spring, 2009, Spring, 2010, Fall, 2010, Spring, 2011, Spring 2013

**RESEARCH**

**Peer-Reviewed Journal Articles**

- 2015                      Chunliang Feng, Ashley C. DeMarco, Ebrahim Haroon and **James K. Rilling**. Neuroticism modulates the effects of intranasal vasopressin treatment on the neural response to positive and negative social interactions. *Neuropsychologia* 73: 108-115.
- 2014                      Chunliang Feng, Patrick Hackett, Ashley C. DeMarco, Xu Chen, Sabrina Stair, Ebrahim Haroon, Beate Ditzen, Giuseppe Pagnoni and **James K. Rilling**. Oxytocin and vasopressin effects on the neural response to social cooperation are modulated by sex in humans. *Brain Imaging Behav.* Epub ahead of print.
- 2014                      **James K. Rilling** and Larry J. Young. The biology of mammalian parenting and its effect on offspring development. *Science* 345(6198):771-6.
- 2014                      **James K. Rilling**. Comparative Primate Neurobiology and the Evolution of Brain Language Systems. *Current Opinion in Neurobiology* 28C:10-14.
- 2014                      Jennifer S. Mascaró, Patrick D. Hackett and **James K. Rilling**. Differential neural responses to child and sexual stimuli in human fathers and non-fathers and their hormonal correlates. *Psychoneuroendocrinology* 46:153-163.
- 2014                      **James K. Rilling**. Comparative Primate Neuroimaging: insights into human brain evolution. *Trends in Cognitive Sciences* 18(1): 45-55.
- 2014                      **James K. Rilling**, Ashley C. DeMarco, Patrick D. Hackett, Xu

- Chen, Pritam Gautam, Sabrina Stair, Ebrahim Haroon, Richmond Thompson, Beate Ditzen, Rajan Patel and Giuseppe Pagnoni. Sex differences in the neural and behavioral response to intranasal oxytocin and vasopressin during human social interaction. *Psychoneuroendocrinology* 39:237-48.)
- 2013 Jennifer S. Mascaró, Patrick D. Hackett, Harold Gouzoules, Adriana Lori and **James K. Rilling**. Behavioral and genetic correlates of the neural response to infant crying among human fathers. *Social, Cognitive and Affective Neuroscience*. Epub ahead of print.
- 2013 Sarah K. Barks, Lisa A. Parr and **James K. Rilling**. The Default Mode Network in Chimpanzees (*Pan troglodytes*) is Similar to That of Humans. *Cerebral Cortex*. Epub ahead of print.
- 2013 Jennifer S. Mascaró, Patrick D. Hackett and **James K. Rilling**. Testicular volume is inversely correlated with nurturing-related brain activity in human fathers. *Proc Natl Acad Sci U S A* 110(39):15746-51.
- 2013 Longchuan Li, Xiaoping Hu, Todd M. Preuss, Matthew F. Glasser, Frederick W. Damen, Yuxuan Qui and **James K. Rilling**. Mapping putative hubs in human, chimpanzee (*Pan troglodytes*) and rhesus macaque (*Macaca mulatta*) connectomes via diffusion tractography. *Neuroimage* 80:462-74.
- 2013 Xu Chen, Bhargav Errangi, Longchuan Li, Matthew F. Glasser, Lars T. Westlye, Anders M. Fjell, Kristine B. Walhovd, Xiaoping Hu, James G. Herndon, Todd M. Preuss, **James K. Rilling**. Brain aging in humans, chimpanzees (*Pan troglodytes*), and rhesus macaques (*Macaca mulatta*): magnetic resonance imaging studies of macro- and microstructural changes. *Neurobiology of Aging* 34(10):2248-60.
- 2013 **James K. Rilling**. The neural and hormonal bases of human parental care. *Neuropsychologia*, 2013. **51**(4): p. 731-747.
- 2013 Jennifer S. Mascaró, **James K. Rilling**, Lobsang Tenzin Negi, and Charles L. Raison. Pre-existing brain function predicts subsequent practice of mindfulness and compassion meditation. *Neuroimage*, 2013. 69: p. 35-42.
- 2013 Jennifer S. Mascaró, **James K. Rilling**, Lobsang Tenzin Negi, and Charles L. Raison. Compassion meditation enhances empathic

- accuracy and related neural activity. *Soc Cogn Affect Neurosci*, 2013. 8(1): p. 48-55.
- 2012 Longchuan Li, **James K. Rilling**, Todd M. Preuss, Matthew F. Glasser, Frederick W. Damen, and Xiaoping Hu. Quantitative assessment of a framework for creating anatomical brain networks via global tractography. *Neuroimage*, 61(4):1017-30.
- 2012 Erin E. Hecht, David A. Gutman, Todd M. Preuss, Mar M. Sanchez, Lisa A. Parr, and **James K. Rilling**. Process Versus Product in Social Learning: Comparative Diffusion Tensor Imaging of Neural Systems for Action Execution-Observation Matching in Macaques, Chimpanzees, and Humans. *Cerebral Cortex* 23(5):1014-24.
- 2012 Longchuan Li, **James K. Rilling**, Todd M. Preuss, Matthew F. Glasser, Xiaoping Hu. The Effects of Connection Reconstruction Method on the Interregional Connectivity of Brain Networks via Diffusion Tractography. *Human Brain Mapping* 33(8):1894-913.
- 2012 **James K. Rilling**, Demarco, A.C., Hackett, P.D., Thompson, R., Ditzen, B., Patel, R., and Pagnoni, G. Effects of intranasal oxytocin and vasopressin on cooperative behavior and associated brain activity in men. *Psychoneuroendocrinology* 37(4):447-61.
- 2012 Yamasue, H., J. R. Yee, R. Hurlemann, **J. K. Rilling**, F. S. Chen, A. Meyer-Lindenberg and H. Tost (2012). Integrative approaches utilizing oxytocin to enhance prosocial behavior: from animal and human social behavior to autistic social dysfunction. *J Neurosci* 32(41): 14109-14117.
- 2011 **James K. Rilling**, Matthew F. Glasser, Saad Jbabdi, Jesper Andersson and Todd M. Preuss. Continuity, divergence and the evolution of brain language pathways. *Frontiers in Evolutionary Neuroscience* 3:11.
- 2011 **James K. Rilling**, Jan Scholz, Todd Preuss, Matthew Glasser Bhargav Errangi and Timothy Behrens. Differences between chimpanzees and bonobos in neural systems supporting social cognition. *Social Cognitive and Affective Neuroscience* 7(4):369-79.
- 2011 **James K. Rilling** and Alan G. Sanfey. The Neuroscience of Social Decision-Making. *Annual Review of Psychology* 62:23-48.
- 2011 Tor Wager, Lauren Atlas, Lauren Leotti and **James K. Rilling**. Predicting individual differences in placebo analgesia: Contributions of brain activity during anticipation and pain

- experience. *Journal of Neuroscience* 31(2):439-52.
- 2010 Longchuan Li, Todd M. Preuss, **James K. Rilling**, William D. Hopkins, Matthew F. Glasser, Bhargav Kumar, Roger Nana, Xiaodong Zhang, Xiaoping Hu. Chimpanzee (Pan troglodytes) precentral corticospinal system asymmetry and handedness: a diffusion magnetic resonance imaging study. *PLoS ONE* 5(9):e12886.
- 2010 J. H. Balsters, E. Cussans, J. Diedrichsen, K.A. Philips, T.M. Preuss, **J.K. Rilling**, N. Ramnani. Evolution of the cerebellar cortex: The selective expansion of prefrontal-projecting cerebellar lobules. *NeuroImage* 49: 2045-2052.
- 2010 Ashwin Ramayya, Matthew F. Glasser and **James K. Rilling**. A DTI investigation of the neural substrates supporting tool use. *Cerebral Cortex*.20(3): 507-16.
- 2009 **James K. Rilling**, Torrey L. Kaufman, E.O. Smith, Rajan Patel and Carol M. Worthman. Abdominal depth and waist circumference as influential determinants of human female attractiveness. *Evolution and Human Behavior* 30(1): 21-31.
- 2008 **James K. Rilling**. Neuroscientific approaches and applications within anthropology. *Yearbook of Physical Anthropology, Am J Phys Anthropol Suppl* 47, 2-32.
- 2008 **James K. Rilling**, Brooks King-Casas and Alan G. Sanfey. The Neurobiology of Social Decision-Making. *Current Opinion in Neurobiology* 18(2):159-65.
- 2008 **James K Rilling**, Julien E Dagenais, David R Goldsmith, Andrea L Glenn and Giuseppe Pagnoni. Social cognitive neural networks during ingroup and outgroup interactions. *Neuroimage* 41(4):1447-1461.
- 2008 **James K. Rilling**, Agnes Lacreuse, Sarah K. Barks, Hanie Elfenbein, Giuseppe Pagnoni, John R. Votaw and James G. Herndon. Effect of menstrual cycle on resting brain metabolism in female rhesus monkeys. *NeuroReport*. 19(5): 537-41.
- 2008 **James K. Rilling**, Matthew F. Glasser, Todd M. Preuss, Xiangyang Ma, Tiejun Zhao, Xiaoping Hu and Timothy E.J. Behrens. The Evolution of the Arcuate Fasciculus Revealed with Comparative DTI. *Nature Neuroscience* 11(4): 426-428.

- 2008 Matthew F. Glasser, **James K. Rilling**. DTI Tractography of the Human Brain's Language Pathways. *Cereb Cortex* 18(11):2471-82.
- 2008 **James K. Rilling**, David R. Goldsmith, Andrea L. Glenn, Meeta R. Jairam, Hanie A. Elfenbein, Julien E. Dagenais, Christina D. Murdock and Giuseppe Pagnoni. The Neural Correlates of the Affective Response to Unreciprocated Cooperation. *Neuropsychologia*. 46(5):1256-1266.
- 2007 **James K. Rilling**, Sarah K. Barks, Lisa A. Parr, Todd M. Preuss, Tracy L. Faber, Giuseppe Pagnoni, J. Douglas Bremner, John R. Votaw. A comparison of resting state brain activity in humans and chimpanzees. *Proceedings of the National Academy of Sciences*. 104(43): 17146-51.
- 2007 **James K. Rilling**, Andrea L. Glenn, Meeta R. Jairam, Giuseppe Pagnoni, David R. Goldsmith, Hanie A. Elfenbein and Scott O. Lilienfeld. Neural correlates of social cooperation and non-cooperation as a function of psychopathy. *Biological Psychiatry* 61(11):1260-71.
- 2007 Erin B. McClure, Jessica M. Parrish, Eric E. Nelson, Joshua Easter, John F. Thorne, **James K. Rilling**, Monique Ernst and Daniel S. Pine. Responses to Conflict and Cooperation in Adolescents with Anxiety and Mood Disorders. *Journal of Abnormal Child Psychology* 35(4):567-77.
- 2006 **James K. Rilling**. Human and non-human primate brains: are they allometrically scaled versions of the same design? *Evolutionary Anthropology* 15(2): 65-77.
- 2006 Patel RS, Bowman FD, **J.K. Rilling**. Determining hierarchical functional networks from auditory stimuli fMRI. *Human Brain Mapping* 27(5):462-470.
- 2006 Richard M Wood, **James K Rilling**, Alan G Sanfey, Zubin Bhagwagar, and Robert D Rogers. The effects of tryptophan depletion on the performance of an iterated Prisoner's Dilemma game in healthy adults. *Neuropsychopharmacology* 31(5):1075-84.
- 2006 Patel, R.S., F.D. Bowman, and **J.K. Rilling**, A Bayesian approach to determining connectivity of the human brain. *Human Brain Mapping* 27:267-276.
- 2004 **James K. Rilling**, Alan G. Sanfey, Jessica A. Aronson, Leigh E. Nystrom and Jonathan D. Cohen. Opposing BOLD responses to



- reciprocated and unreciprocated altruism in putative reward pathways. *NeuroReport* 15(16): 2539-2543.
- 2004 **James K. Rilling**, James T. Winslow, and Clinton D. Kilts. The neural correlates of mate competition in dominant male rhesus macaques. *Biological Psychiatry* 56:364-375.
- 2004 **James K. Rilling**, Alan G. Sanfey, Jessica A. Aronson, Leigh E. Nystrom and Jonathan D. Cohen. The neural correlates of theory of mind within interpersonal interactions. *NeuroImage* 22(4): 1693-1702.
- 2004 Tor D. Wager, **James K. Rilling**, Edward E. Smith, Alex Sokolik, Kenneth L. Casey, Richard J. Davidson, Stephen M. Kosslyn, Robert M. Rose, and Jonathan D. Cohen. Placebo-induced changes in fMRI in the anticipation and experience of pain. *Science* 303: 1162-1167.
- 2003 Alan G. Sanfey\*, **James K. Rilling\***, Jessica A. Aronson, Leigh E. Nystrom, and Jonathan D. Cohen. The neural basis of economic decision-making in the Ultimatum Game. *Science* 300(5626):1755-1758.  
\* these two authors contributed equally to this manuscript
- 2003 CE. MacLeod, K. Zilles, A. Schleicher, **J. Rilling**, and KR. Gibson. Expansion of the neocerebellum in Hominoidea. *Journal of Human Evolution*. 44(4):401-29.
- 2002 **James K. Rilling**, David A. Gutman, Thorsten R. Zeh, Giuseppe Pagnoni, Gregory S. Berns and Clinton D. Kilts. A neural basis for social cooperation. *Neuron* 35:395-405.
- 2002 **James K. Rilling** and Rebecca A. Seligman. A quantitative morphometric comparative analysis of the primate temporal lobe. *Journal of Human Evolution* 42:505-533.
- 2001 L. Marino, K. Sudheimer, T. Murphy, K. Davis, D. Ann Pabst, W. McLellan, **J. Rilling** and J. Johnson. Anatomy and three-dimensional reconstruction of the brain of a bottlenose dolphin (*Tursiops truncatus*) from Magnetic Resonance Images (MRI). *The Anatomical Record*. 264(4):397-414.
- 2001 **James K. Rilling**, James T. Winslow, Derek J. O'Brien, David A. Gutman, John M. Hoffman and Clinton D. Kilts. Neural correlates of maternal separation in rhesus monkeys. *Biological Psychiatry* 49:146-157.

- 2000 Lori Marino, **James K. Rilling**, Shinko K. Lin, and Sam H. Ridgway. Relative volume of the cerebellum in dolphins and comparison with anthropoid primates. *Brain, Behavior and Evolution* 56:204-211.
- 2000 William D. Hopkins and **James K. Rilling**. A comparative MRI study of the relationship between neuroanatomical asymmetry and interhemispheric connectivity in primates: implication for the evolution of functional asymmetries. *Behavioral Neuroscience* 114 (4): 739-748.
- 1999 **James K. Rilling** and Thomas R. Insel. The Human Neocortex in Comparative Perspective Using Magnetic Resonance Imaging. *Journal of Human Evolution* 37:191-223.
- 1999 **James K. Rilling** and Thomas R. Insel. Differential expansion of neural projection systems in primate brain evolution. *NeuroReport* 10: 1453-1459.
- 1998 **James K. Rilling** and Thomas R. Insel. Evolution of the Primate Cerebellum: differences in relative volume among monkeys, apes and humans. *Brain, Behavior and Evolution* 52: 308-314.
- 1998 Mar M. Sanchez, Elizabeth F. Hearn, Dung Do, **James K. Rilling**, James G. Herndon, and Thomas R. Insel. Differential rearing affects corpus callosum size and cognitive function of rhesus monkeys. *Brain Research* 812:38-49.
- 1998 William H. Hopkins, Lori Marino, **James K. Rilling**, and L. MacGregor. Planum temporale asymmetries in Great apes but not in lesser apes. *Neuroreport* 9:2913-2918.
- 1996 **James K. Rilling**, Carol M. Worthman, Benjamin C. Campbell, Joy F. Stallings, Michael Mbizvi. Ratios of plasma and salivary testosterone throughout puberty: production vs. bioavailability. *Steroids* 61:374-378.
- 1992 Thaddeus G. Golos, Richard R. Handrow, Maureen Durning, Jennifer M. Fischer, and **James K. Rilling**. Regulation of Chorionic Gonadotropin-alpha and Chorionic Somatomammotropin Messenger Ribonucleic Acid Expression by 8-Bromo-Adenosin 3', 5'-Monophosphate and Dexamethasone in Cultured Rhesus Monkey Syncytiotrophoblasts. *Endocrinology* 131 (1): 89-100.

## **Book Chapters**

- 2014            **James K. Rilling** and Dietrich Stout. Evolution of the Neural Bases of Higher Cognitive Function in Humans. In Michael Gazzaniga (ed), *Cognitive Neurosciences*, 5<sup>th</sup> edition, MIT Press.
- 2011            **James K. Rilling**. The Neurobiology of Cooperation and Altruism. In R.W. Sussman, C.R. Cloninger (eds.), *Origins of Altruism and Cooperation*. Springer Science+Business Media.
- 2011            Alan G. Sanfey and **James K. Rilling**. Neural bases of social decision-making. In Vartanian, O., & Mandel, D. R. (Eds.), *Neuroscience of decision making*. New York: Psychology Press
- 2011            **James K. Rilling**. The Social Brain in Interactive Games. In Todorov, A., Fiske, S. T., & Prentice, D. (Eds.). /*Social Neuroscience: Toward Understanding the Underpinnings of the Social Mind*/. Oxford University Press.
- 2009            C.C. Sherwood, **J.K. Rilling**, R.L. Holloway, and P.R. Hof. Evolution, of the brain: in humans – specializations in a comparative perspective. In: *Encyclopedia of Neuroscience*, M.D. Binder, N. Hirokawa, U. Windhorst, M.C. Hirsch (eds), Springer-Verlag.
- 2009            R.L. Holloway, C.C. Sherwood, **J.K. Rilling**, and P.R. Hof. Evolution, of the brain: in humans – paleoneurology. In: *Encyclopedia of Neuroscience*, M.D. Binder, N. Hirokawa, U. Windhorst, M.C. Hirsch (eds), Springer-Verlag.
- 2009            **James K. Rilling** and Alan G. Sanfey. Decision-making and neuroeconomics: Social interaction. In: Larry Squire (Ed) *Encyclopedia of Neuroscience*. Academic Press, Oxford.
- 2007            **James K. Rilling**. Evolution of the Cerebellum in Anthropoid Primates. In John Kaas and T.M. Preuss (eds.) Evolution of Nervous Systems. Elsevier Press. Oxford. pp 149-156.
- 2006            **James K. Rilling**. Noninvasive neuroimaging techniques for the study of primate brain development. In: Gene P. Sackett, Gerald Ruppenthal, and Kate Elias (eds) *Nursery Rearing of Nonhuman Primates in the 21st Century*. Springer. New York. pp. 485-511.

## Commentaries

- 2009 **James K. Rilling.** A Potential Role for Oxytocin in the Intergenerational Transmission of Secure Attachment. *Neuropsychopharmacology* 34:2621-2622. (cited by 4)
- 2001 **James K. Rilling.** Allometric departures for the human brain provide insights into hominid brain evolution. *Behavioural and Brain Sciences* 24:292-293. (cited by 4)

## PRESENTATIONS:

### Invited talks:

- 2014 **James K. Rilling** and Jennifer Mascaro. “Biological correlates of individual variation in human paternal behavior”. Society for Research on Child Development, Philadelphia, March 21.
- 2014 **James K. Rilling** and Jennifer Mascaro. “Neural, hormonal and genetic correlates of variation in human paternal behavior”. Society for Research on Child Development Parenting Special Topic Meeting, San Diego, CA, Nov. 13.
- 2014 **James K. Rilling,** “Neural, hormonal and genetic correlates of variation in human paternal behavior”, UGA/Emory Symposium on the Biology of Family and Social Relationships, March 7.
- 2014 **James K. Rilling,** “Comparative Primate Neuroimaging: insights into human brain evolution”, Darwin Days celebration at the University of North Georgia, Feb. 28.
- 2013 **James K. Rilling,** “Comparative Primate Neuroimaging: insights into human brain evolution”. Franklin Fellow Neuroimaging Speaker Series, University of Georgia, Oct. 25.
- 2013 **James K. Rilling,** “Fatherhood”. Emory University Psychoanalytic Institute, October 10.
- 2013 **James K. Rilling,** “Neural, hormonal and genetic correlates of variation in human paternal behavior”. Frontiers in Neuroscience Seminar Series, Emory University, Sept. 27.
- 2013 **James K. Rilling,** “Evolution of the neural basis of higher cognitive function in humans”. 2013 Summer Institute in Cognitive Neuroscience, Tahoe, California, June 25.

- 2013 **James K. Rilling**, “The biological basis of individual variation in paternal nurturance”. Duke University Center for Cognitive Neuroscience Speaker Series, Duke University, April 25.
- 2012 **James K. Rilling**, “Effects of oxytocin on human social behavior and associated brain activity”, for minisymposium entitled, “Integrative Approaches Utilizing Oxytocin To Enhance Prosocial Behavior: From Animal and Human Social Behavior to Autistic Social Dysfunction”, Society for Neuroscience, New Orleans (Oct. 14, 2012).
- 2012 **James K. Rilling**, “The Evolution of Brain Language Systems”. Annual Scientific Meeting of the Academy of Neurologic and Communication Disorders and Sciences, Omni CNN Center, Atlanta, GA, November 14.
- 2012 **James K. Rilling**, Response to Kyabje Locho Rinpoche’s talk, “Understanding the relationship between affection, love, empathy and compassion”, The Emory-Tibet Partnership, Emory University, November 1.
- 2012 **James K. Rilling**, “The Neurobiology of Fairness”, Fairness Conference, Emory University, October 18.
- 2012 **James K. Rilling**, “Effects of Oxytocin and Vasopressin on Human Brain Activity and Behavior in Social Interactive Contexts”, Department of Psychiatry Grand Rounds: Emory University (March 14, 2012).
- 2011 **James K. Rilling**, “Human Brain Specializations Related to Language”, Uniquely Human Features of the Brain: Salk Institute (La Jolla, CA) (October 7-8).
- 2011 **James K. Rilling**, “Effects of intranasal oxytocin and vasopressin on cooperative behavior and associated brain activity in humans”, Center for Translational Social Neuroscience Workshop on Prosocial Behavior: Emory University (October 23-24).
- 2011 **James K. Rilling** and Richmond Thompson, “The Biological basis of individual variation in paternal nurturance.”, Templeton Positive Neuroscience Retreat: Philadelphia, PA (August 1-3, 2011)
- 2011 **James K. Rilling**, “Comparative Higher Primate Neuroimaging: insights into the evolution of human brain and mind.”, Speaker

series of Emory University Emeritus College : Luce Center, Emory University.

- 2011 **James K. Rilling**, "Structural Brain Imaging Methods and Applications", and "Evolution of Human Life Histories", Center for Mind, Brain and Culture workshop entitled, "What's Human about the Human Brain? Exploring Evolutionary Specializations of the Human Brain": Emory University (May 25-27, 2011)
- 2010 **James K. Rilling**. "Effects of Intranasal Oxytocin and Vasopressin on Cooperative Behavior and Associated Brain Activity in Men", Cognition and Development Seminar: Emory University Department of Psychology, November 9, 2010.
- 2010 **James K. Rilling**. "Biological and Evolutionary Perspectives on Human Sexuality", for the conference, "Sex Addiction: Facts, Fiction, Neurobiology and a live case example", Holiday Inn, Decatur, GA, October 15, 2010.
- 2010 **James K. Rilling**. "Investigating the neural basis of social decision-making in the context of interactive games". Joint Tamagawa-Keio-Caltech lecture course on Neuroeconomics. Keio University, Tokyo, September 10, 2010.
- 2010 **James K. Rilling**, "Comparative Higher Primate Neuroimaging: Insights into the Evolution of Human Brain and Mind". Culture, Evolution and the Brain. Research Center for Group Dynamics Seminar Series at the University of Michigan, March 29.
- 2010 **James K. Rilling**, "Comparative Higher Primate Neuroimaging: Insights into the Evolution of Human Brain and Mind". McDonnell Foundation Network Meeting, Howard University, Washington, D.C., March 11.
- 2009 **James K. Rilling**, "Comparative Higher Primate Neuroimaging: Insights into the Evolution of Human Brain and Mind". Institute of Neuroscience, New Castle University Medical School. December 10.
- 2009 **James K. Rilling**. "Comparative Higher Primate Neuroimaging: Insights into the Evolution of Human Brain and Mind". The Evolution of Brain, Mind and Culture. Center for Mind, Brain and Culture, Emory University. November 12.
- 2009 **James K. Rilling**. "The neural correlates of mate competition in dominant male rhesus macaques". Evolutionary neurobiology of

social hierarchies: Studies in humans, monkeys and rodents. 41<sup>st</sup> annual meeting of the European Brain and Behavior Society. Rhodes, Greece. September 18.

- 2009 **James K. Rilling**, “The arcuate fasciculus in humans, chimpanzees and macaques: implication for the evolution of language”. Neurobiology of human language and its evolution: Primate perspectives. 16th Annual Cognitive Neuroscience Society Meeting. San Francisco, CA. March 21-24.
- 2009 **James K. Rilling**, “Investigating the neural basis of cooperation and non-cooperation using fMRI and interactive games”. George Washington University.
- 2008 **James K. Rilling**. “Comparative higher primate neuroimaging; implications for the evolution of human brain and mind”. Cognitive Sciences Brown Bag series at Georgia State University.
- 2008 **James K. Rilling**, “The Neurobiology of Cooperation”. Empathy and Compassion as Seen from the Perspective of Psychoanalysis. Emory University.
- 2008 **James K. Rilling**, “Social decision-making: neuroscientific and economic perspectives”. Center for Mind, Brain and Culture (CMBC) lunch discussion series.
- 2008 **James K. Rilling**, “Investigating the neural basis of cooperation and non-cooperation using fMRI and interactive games”. Baylor College of Medicine.
- 2008 **James K. Rilling**, “Comparative Higher Primate Neuroimaging: Insights into Human Brain Evolution”. Frontiers in Neuroscience: Emory University, Atlanta, GA.
- 2007 **James K. Rilling**. “The neurobiology of trust and social exchange”. Annual Meeting of the American Accounting Association. Chicago, Ill.
- 2007 **James K. Rilling** and Todd M. Preuss. “Searching for Human Brain Specializations with Structural and Functional Neuroimaging”. The Human Brain Evolving: Papers in Honor of Ralph Holloway. The Stone Age Institute, Indiana University.
- 2006 **James K. Rilling**, “The Neurobiology of Trust”. Biology of Trust in the Resolution of Conflict: Atlanta, GA.

- 2006 **James K. Rilling**, “Searching for Human Brain Specializations with Structural and Functional NeuroImaging”. Kavli Frontiers of Science Symposium: Irvine, California.
- 2006 **James K. Rilling**, “The neural basis of social cooperation and non-cooperation in the Prisoner’s Dilemma game”, Emory University Cognition and Development Speaker Series, Atlanta, GA.
- 2005 **James K. Rilling**, “Neuroimaging Social Cognitive Function in Higher Primates Using Ecologically Relevant Tasks”, Society for Neuroscience: Washington, D.C.
- 2005 **James K. Rilling**, “Searching for Human Brain Specializations with Positron Emission Tomography (PET) and Diffusion Tensor Imaging (DTI)”. Department of Radiology, Medical College of Wisconsin: Milwaukee, Wisconsin.
- 2005 **James K. Rilling**, “Investigating the neurobiology of social cooperation with functional neuroimaging”, American Association for the Advancement of Science: St. Louis, MO.
- 2005 **James K. Rilling**. “Exploring the social brain with fMRI and interactive games”. Princeton University Conference on Social Cognitive Affective Neuroscience. Princeton, NJ.
- 2004 **James K. Rilling**. “Exploring the neural bases of social decision-making using fMRI and interactive games”. University of Oxford Autumn School in Cognitive Neuroscience, Oxford, U.K.
- 2004 **James K. Rilling**. “Human, Ape and Monkey Brains: are they allometrically scaled versions of the same design?”, Center for Integrative Study of Animal Behavior, Indiana University.
- 2004 **James K. Rilling**. “Exploring the social brain with fMRI and interactive games”. Georgia State University, Department of Psychology seminar series, Atlanta, GA.
- 2004 **James K. Rilling**. “Exploring the social brain with fMRI and interactive games”. Emory University, Frontiers in Neuroscience seminar series, Atlanta, GA.
- 2004 **James K. Rilling**. “Exploring the social brain with fMRI and interactive games”. Morehouse College. Undergraduate neuroscience seminar series, Atlanta, GA.



- 2003 **James K. Rilling.** “Neuroscience of Social Emotions”. Santa Fe Institute, Founding workshop: New Directions in Behavioral Sciences.
- 2003 **James K. Rilling.** “Some insights into the neural bases of economic decision-making”. Georgia State University, Department of Economics seminar series, Atlanta, GA.
- 2003 **James K. Rilling.** “A monkey model for the neural basis of male sexual jealousy”. Emory University, Department of Anthropology Evolution and Human Behavior seminar series, Atlanta, GA.
- 2003 **James K. Rilling.** “A potential neural mechanism for reciprocal altruism”. American Anthropological Association. 102<sup>nd</sup> annual meeting, Chicago, November 19-23, 2003. For an invited session entitled, “Mechanisms for maintaining peace in primate societies” chaired by Karen B. Strier.

**Conference Presentations:**

- 2014 Chen, X., P. Hackett, A. DeMarco, C. Feng and **J. Rilling.** “Lateralized and opposing effects of vasopressin on the anterior insula response to positive and negative social interactions among human males.”, Society for Neuroscience, Washington D.C. (Nov. 16).
- 2014 C. Feng, P.D. Hackett, A.C. DeMarco, X. Chen, **J.K. Rilling.** “Intranasal oxytocin and vasopressin attenuate sex differences in the neural response to cooperative social interactions.”, Society for Neuroscience, Washington D.C. (Nov. 16).
- 2014 R.R. Thompson, D. Price and **J.K. Rilling.** “Vasopressin effects on responses to same- and other-sex faces in men and women.”, Society for Neuroscience, Washington D.C. (Nov. 16).
- 2014 **James K. Rilling.** “Behavioral and genetic correlates of the neural response to infant crying among human fathers”. Fourteenth International Conference on Shaken Baby Syndrome/Abusive Head Trauma, Denver, CO (September 23, 2014).
- 2014 Xu Chen, Ashley DeMarco, Patrick Hackett, Chunliang Feng and **James K. Rilling.** “Oxytocin attenuates the neural response to unreciprocated cooperation”, Organization for Human Brain Mapping, Hamburg, Germany (June 8-12).

- 2013 J. S. MASCARO, P. D. HACKETT, **J. K. RILLING**. “Neural and hormonal bases of paternal nurturance”, Society for Neuroscience, San Diego (Nov. 10, 2013)
- 2013 D. J. COPPETO, T. M. PREUSS, K. L. BRYANT, **J. K. RILLING**. “A comparative white matter atlas of humans, chimpanzees (*Pan troglodytes*), and bonobos (*Pan paniscus*) using diffusion tensor imaging”, Society for Neuroscience, San Diego (Nov. 10, 2013)
- 2013 X. CHEN, J. PAREDES, T. M. PREUSS, J. G. HERNDON, **J. K. RILLING**. “Oxidative stress in aging is associated with brain demyelination: Some new evidence”, Society for Neuroscience, San Diego (Nov. 11, 2013)
- 2012 X. CHEN, B. ERRANGI, L. LI, L. T. WESTLYE, A. M. FJELL, K. B. WALHOVD, J. G. HERNDON, T. PREUSS, **J. K. RILLING**. “A comparative Diffusion Tensor Imaging (DTI) study of white matter aging in female humans, chimpanzees and macaque monkeys”, Society for Neuroscience, New Orleans (Oct. 13, 2012).
- 2012 J. S. MASCARO, P. HACKETT, **J. K. RILLING**. “Neural systems related to paternal empathy in humans”, Society for Neuroscience, New Orleans (Oct. 16, 2012).
- 2012 Xu Chen, Ashley DeMarco, Alleyne Ross, Ebrahim Haroon, **James Rilling** “Variation in Amygdala Size Predicts Prosocial Behavior in Women”, Organization for Human Brain Mapping: Beijing, China (June 14, 2012).
- 2011 **James K. Rilling**, Ashley DeMarco, Patrick Hackett, R. Thompson, Beate Ditzen, Rajan Patel and Giuseppe Pagnoni, “Effect of intranasal oxytocin and vasopressin on cooperative behavior and brain activity in men”, Society for **Social Neuroscience**: Washington, D.C. (November 11, 2011).
- 2011 **James K. Rilling**, Ashley DeMarco, Patrick Hackett, R. Thompson, Beate Ditzen, Rajan Patel and Giuseppe Pagnoni, “Effect of intranasal oxytocin and vasopressin on cooperative behavior and brain activity in men”, Society for Neuroscience: Washington, D.C. (November 13, 2011)
- 2011 Jennifer S. Mascaró, **James K. Rilling**, Charles Raison, A *longitudinal, controlled investigation of compassion meditation*

*and its relationship with the neurobiology of empathy*, Society for Neuroscience: Washington, D.C. (November 16, 2011)

- 2010 **James K. Rilling**. “Investigating the Neural Basis of Social Cooperation and Non-Cooperation Using fMRI and Interactive Games” for the symposium, “Advances in Neuroeconomics” Southern Economic Society, Atlanta, GA, November 21, 2010.
- 2010 **James K. Rilling**. “Language pathways in humans and chimpanzees” for the symposium, “Homo sapiens and Pan troglodytes: what makes us different?”. 23<sup>rd</sup> Congress of the International Primatological Society, Kyoto, Japan, September 13, 2010.
- 2010 **James K. Rilling**, Jan Scholz, Todd Preuss, Matthew Glasser and Timothy Behrens. “Neuroanatomical differences between chimpanzees and bonobos: a VBM and DTI analysis”. 16<sup>th</sup> annual meeting of the Organization for Human Brain Mapping. Barcelona, June 7, 2010.
- 2010 **James K. Rilling**, Bhargav K. Errangi, Longchuan Li, Matthew Glasser, Xiadong Zhang, Helen Mayberg, Xiaoping Hu and Todd M. Preuss. “Brain white matter asymmetries in humans and chimpanzees: a comparative Diffusion Tensor Imaging (DTI) study”. 79<sup>th</sup> annual meeting of the American Association of Physical Anthropologists. Albuquerque, NM, April 17.
- 2009 **James K. Rilling**, “The Neurobiology of Cooperation and Altruism”. Context and the Evolution of Mechanisms for Solving Collective Action Problems”. Indiana University.
- 2009 **James K. Rilling**, “The Neurobiology of Cooperation and Altruism”. Man the Hunted: Sociality, Altruism and Well-Being. Washington University, St. Louis, MO.
- 2008 E. Hecht, D. Gutman, M. Glasser, J. Mascaro, S. Hamann, T.M. Preuss, and **J.K. Rilling**. Comparing amygdala connectivity between monkeys, apes, and humans using diffusion tensor imaging. 77<sup>th</sup> annual meeting of the American Association of Physical Anthropologists. Columbus, OH.
- 2008 **J.K. Rilling**, T.L. Kaufman, E.O. Smith, R. Patel and C.M. Worthman. Abdominal depth as a principal determinant of human female attractiveness. 77<sup>th</sup> annual meeting of the American Association of Physical Anthropologists. Columbus, OH.

- 2008 **James K. Rilling**, Julien E. Dagenais, David R. Goldsmith, Andrea L. Glenn and Giuseppe Pagnoni. Social cognitive neural networks during in-group and out-group interactions. 15<sup>th</sup> annual meeting of the Cognitive Neuroscience Society. San Francisco, CA.
- 2007 A. Ramayya, M. Glasser, W. Hopkins, T. Preuss and **J. Rilling**. A Comparative Diffusion Tensor Imaging (DTI) Study of Tool Use Pathways in Humans, Apes and Monkeys. 13<sup>th</sup> annual meeting of the Organization for Human Brain Mapping, Chicago, Ill.
- 2007 **J.K. RILLING**, M.F. GLASSER, T.M. PREUSS, X. MA, X. ZHANG, T. ZHAO, X. HU AND T.E.J. BEHRENS. A comparative diffusion tensor imaging (DTI) study of the arcuate fasciculus language pathway in humans, chimpanzees and rhesus macaques. Annual meeting of the American Association of Physical Anthropologists, Philadelphia, PA.
- 2006 **J. K. RILLING**, M. F. GLASSER, T. M. PREUSS, X. MA, X. ZHANG, T. ZHAO, X. HU, T. BEHRENS. A comparative diffusion tensor imaging (DTI) study of the arcuate fasciculus language pathway in humans, chimpanzees, and rhesus macaques. Annual Meeting of the Society for Neuroscience, Atlanta, GA.
- 2006 M. F. GLASSER, **J. RILLING**. Diffusion tensor imaging tractography of the human language pathways. Annual Meeting of the Society for Neuroscience, Atlanta, GA.
- 2006 J. S. MASCARO, A. MIURA, M. F. GLASSER, T. M. PREUSS, **J. K. RILLING**. A comparison of cerebellar connectivity in humans, chimpanzees, and rhesus macaques using diffusion tensor imaging (DTI) and probabilistic tractography Annual Meeting of the Society for Neuroscience, Atlanta, GA.
- 2006 **James K Rilling**, Sarah K Barks, Lisa A. Parr, Todd M. Preuss, Tracy L Faber, J. Douglas Bremner, John R Votaw. Comparing resting brain activity in monkeys, apes and humans. Organization for Human Brain Mapping. 12<sup>th</sup> annual meeting, Florence, Italy, June 11-15, 2006.
- 2006 Timothy E.J. Behrens, Mark William Woolrich, Heidi Johansen-Berg, Mark Pinsk, Wolfgang Richter, Marlene Richter, Charles Gross, Sabine Kastner, Matthew D. Robson, **James K. Rilling**. Relative contribution of motor and association fibres to the white matter underlying motor cortex in human and macaque. International Society for Magnetic Resonance and Medicine

- (ISMRM) 14<sup>th</sup> Scientific Meeting & Exhibition. Seattle, WA. May 6-12, 2006.
- 2005 Comparing resting brain activity in monkeys, apes and humans. Sarah K. Barks, **James K. Rilling**, Lisa A. Parr, Todd M. Preuss, Tracey L. Faber, J. Douglas Bremner, and John R. Votaw. Program No. 770.20. *2005 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2005. Online.
- 2005 Comparing white matter fiber tracts in monkeys, apes and humans with Diffusion Tensor Imaging (DTI). **James K. Rilling**, Todd M. Preuss, Xiangyang Ma, Danli Wang, Leonard Howell, Helen Mayberg, Xiaoping Hu. Organization for Human Brain Mapping. 11<sup>th</sup> annual meeting, Toronto, Ontario, Canada, June 12-16, 2005.
- 2005 Exploring the neural correlates of social cooperation and non-cooperation: the effect of sex and group membership. **James K. Rilling**, Andrea L. Glenn, Meeta R. Jairam, Giuseppe Pagnoni, Scott O. Lilienfeld. Organization for Human Brain Mapping. 11<sup>th</sup> annual meeting, Toronto, Ontario, Canada, June 12-16, 2005.
- 2005 Comparing white matter fiber tracts in monkeys, apes and humans with Diffusion Tensor Imaging (DTI). **J.K. Rilling**, T.M. Preuss, X. Ma, D. Wang, L. Howell, H. Mayberg and X. Hu. *American Journal of Physical Anthropology Supplement 40*: 176.
- 2005 Comparing resting brain activity in monkeys, apes and humans. S.K. Barks, **J.K. Rilling**, T.M. Preuss, T.L. Faber, J.D. Bremner, and J.R. Votaw. *American Journal of Physical Anthropology Supplement 40*: 69.
- 2004 Imaging the social brain with fMRI and interactive games. **J.K. Rilling**, A.G. Sanfey, J.A. Aronson, L.E. Nystrom and J.D. Cohen, D. Gutman, T. Zeh, G. Pagnoni, G. Berns and C. Kilts. International College of Neuropharmacology 2004 Congress. Paris, France, June 20-24, 2004.
- 2004 **J.K. Rilling**, A.G. Sanfey, J.A. Aronson, L.E. Nystrom and J.D. Cohen. Neural correlates of theory of mind within interpersonal interactions. Organization for Human Brain Mapping. 10<sup>th</sup> annual meeting, Budapest, Hungary, June 13-17, 2004.
- 2003 **J.K. Rilling**, T. D. Wager, R.J. Davidson, S.M. Kosslyn, R.M. Rose, E.E. Smith, J.D. Cohen. An fMRI investigation of the neural mechanisms of placebo analgesia. Organization for Human Brain Mapping. 9<sup>th</sup> annual meeting, June 18-22, 2003.

- 2003 **J.K. Rilling** and C.D. Kilts. Imaging the neural correlates of mate competition in dominant male rhesus monkeys. *American Journal of Physical Anthropology Supplement* 36: 179.
- 2002 **J.K. Rilling**. Linking culture and mind through neurodevelopment. For an invited session entitled, "Becoming human: anthropology and human development". American Anthropological Association. 101<sup>st</sup> annual meeting, New Orleans, November 20-24, 2002.
- 2002 **J. K. Rilling** Imaging the neural correlates of mating competition in dominant male rhesus monkeys. *Human Behavior and Evolution Society*. 14<sup>th</sup> annual meeting, Rutgers University, New Brunswick, NJ, June 19-23, 2002.
- 2002 **J.K. Rilling**, A.G. Sanfey, J.A. Aronson, L.E. Nystrom and J.D. Cohen. Mapping the brain's response to reciprocated and unreciprocated social cooperation. *Society for Neuroscience abstracts*.
- 2002 A.G. Sanfey, **J.K. Rilling**, J.A. Aronson, L.E. Nystrom and J.D. Cohen. An investigation of the neural dynamics of fairness and unfairness. *Society for Neuroscience abstracts*.
- 2002 **J.K. Rilling**. Allometric departures of the human brain: some methodological considerations. *American Journal of Physical Anthropology Supplement* 34:131-132.
- 2001 **J.K. Rilling** and C.D. Kilts. Imaging the neural correlates of naturalistic aggression in rhesus monkeys. *Society for Neuroscience abstracts*.
- 2001 J.I. Johnson, L. Marino, K.D. Sudheimer, **J.K. Rilling**, K.K. Davis, T.L. Murphy and A.J. Fobbs. A 3-D atlas of the brain of a bottle-nose dolphin in magnetic resonance images. *Society for Neuroscience abstracts*.
- 2001 **J.K. Rilling**. Imaging the neural correlates of social cooperation and non-cooperation in the Prisoner's Dilemma Game. *Human Behavior and Evolution Society*. 13<sup>th</sup> annual meeting, University College, London, June 13-17, 2001.
- 2001 **J. Rilling**, D. Gutman, T. Zeh, G. Pagnoni, G. Berns and C. Kilts. Imaging the neural correlates of social cooperation and non-cooperation in the Prisoner's Dilemma Game. *NeuroImage* 13(6):

xli. 7<sup>th</sup> annual meeting of the Organization for Human Brain Mapping, Brighton, UK, June 10-14, 2001.

- 2001 **J.K. Rilling** and R.A. Seligman. A quantitative morphometric comparative analysis of the primate temporal lobe. *American Journal of Physical Anthropology Supplement* 32:126.
- 2000 **J.K. Rilling** and R.A. Seligman. A quantitative morphometric comparative analysis of the primate temporal lobe. *Society for Neuroscience Abstracts* 26(1):190.
- 2000 **J. Rilling**, C. Kilts, S. Williams, M. Beran, M. Giroux, JM Hoffman, S. Rapoport, S. Savage-Rumbaugh and D. Rumbaugh. A comparative PET study of linguistic processing in humans and language-competent chimpanzees. *American Journal of Physical Anthropology Supplement* 30:263.
- 2000 **J.K. Rilling**, D. Rumbaugh, M. Beran, C. Elder, S. Williams, J. Kelly, M. Giroux, J. Hofman, and C. Kilts. Functional Neuroimaging of Language Skills in Chimpanzees. *Society for the Study of Philosophy and Psychology*, April 21, 2000, Atlanta, GA.
- 2000 L.L. Howell, J.M. Hoffman, J.R. Votaw, C.D. Kilts, A.J. Kitchens, and **J.K. Rilling**. PET imaging in awake rhesus monkeys during cocaine self-administration: Drug-induced changes in regional cerebral blood flow (rCBF). *NIDA Research Monograph Series* 180: 67.
- 1999 D. O'Brien, **J.K. Rilling**, J. Fergusson, J.M. Hoffman, C. Kilts and J. Winslow. Effect of maternal separation stress on regional cerebral glucose metabolism in juvenile rhesus monkeys. *Society for Neuroscience Abstracts* 25(1):617.
- 1999 L. Marino and **J.K. Rilling**. Cetacean (dolphin, whale and porpoise) neuroanatomy as revealed by magnetic resonance imaging. *Society for Neuroscience Abstracts* 25(1):106.
- 1999 **J.K. Rilling**, C. Kilts, S. Williams, J. Kelley, M. Beran, M. Giroux, J.M. Hoffman, S. Savage-Rumbaugh and D. Rumbaugh. Functional neuroimaging of linguistic processing in chimpanzees. *Society for Neuroscience Abstracts* 25(2):2170.
- 1999 **J.K. Rilling** and Thomas R. Insel. Evolution of neocortical size and gyrification in hominids: evidence from comparative neuroanatomy. *American Journal of Physical Anthropology Supplement* 28:233.

- 1998 **J.K. Rilling** and Thomas R. Insel. Differential expansion of neural projection systems in primate evolution. Society for Neuroscience Abstracts 24(1):159.
- 1997 **J. K. Rilling**. Aggressive Behavior Among Men: Biological Underpinnings. Paper presented at the annual meeting of the American Anthropological Association, Washington D.C.
- 1997 Mar M. Sanchez, Elizabeth F. Hearn, **James K. Rilling**, Thomas R. Insel, Paul M. Plotsky. The hypothalamo-pituitary-adrenal function and behaviour in infant rhesus monkeys: effects of differential rearing. Psychoneuroendocrinology 22 (Suppl :2) :S198.
- 1997 M.M. Sanchez, E. Hearn, **J.K. Rilling**, D. Do, J.G. Herndon and T.R. Insel. Rearing condition alters cognitive function and corpus callosum size in infant rhesus monkeys. Society for Neuroscience Abstracts 23(1): 902.
- 1997 **J.K. Rilling**, K. Semendeferi, H. Damasio, and T.R. Insel. The Human neocortex in comparative perspective using magnetic resonance imaging. American Journal of Physical Anthropology Suppl. 24:197.
- 1997 K. Semendeferi, H. Damasio, **J.K. Rilling**, and T. Insel. The volume of the cerebral hemispheres , frontal lobes, and cerebellum in living humans and apes using in vivo magnetic resonance morphometry. American Journal of Physical Anthropology Suppl. 24: 208.
- 1996 **J.K. Rilling**. Migration Stress, pathogen pressure and illness. American Journal of Physical Anthropology Suppl. 22: 198.
- 1996 Thomas W. McDade, Carol M. Worthman, **James K. Rilling**, Joy F. Stallings, and Adrian Angold. Stress, depression, and immune function in American adolescents American Journal of Physical Anthropology Suppl. 22:162.
- 1994 **J.K. Rilling**, B.C. Campbell, J.F. Stallings, and C. M. Worthman. Ratios of plasma and salivary testosterone throughout puberty: production vs. bioavailability. American Journal of Physical Anthropology Suppl. 18:170.

**SERVICE:**



### **Departmental service:**

- IRB committee member (2004-present)
- Biological Anthropology faculty search committee (Fall 2004)
- Chair of graduate student selection committee (Spring 2008)
- Teaching Roundtable Committee (2008-2009)
- Teaching Roundtable Committee (2010-2011)
- Speaker Series Committee (2011-2012)
- Member, Masters Examination Committee (Spring, 2013)
- Chair, Biological Anthropology Search Committee (2012-2013)
- Interim Director of Graduate Studies (Fall, 2013)
- Biological Anthropology faculty search committee (2013-2014)
- Member, Masters Exam Committee (Spring, 2014)
- Chair, Biological Anthropology faculty search committee (Fall, 2014 and Spring 2015)

### **University Service:**

- Honor code appeals panel member (Spring 2005)
- Center for Behavioral Neuroscience (CBN) Graduate Scholars Committee (2003-2010)
- Neuroscience Program graduate applicant interviewer (Spring semester most years)
- Faculty Grievance Committee for the Graduate School of Arts and Sciences (Fall 2007)
- Emory Neuroscience Initiative Research Committee (2008-2009)
- Emory Tibet Science Initiative (Spring 2008) – assisted with development of neuroscience curriculum for Tibetan Buddhist monks
- Neuroscience Program oral examination evaluator (Spring 2008)
- Instrumentation, Bridge, Instruction, and Seed (IBIS) Funding Proposal Review Panel (Spring 2008, Fall 2008)
- Committee member, Scholar's Program in Interdisciplinary Neuroscience Research (SPINR) (Spring, 2010; Fall, 2010; Spring, 2011)
- Executive Committee Member, Graduate Program in Neuroscience (Fall, 2010; Spring, 2011)
- Executive Committee Member, Center for Translational Social Neuroscience (2011-present)
- Member, Center for Mind, Brain and Culture Advisory Committee (Fall, 2012 - present)
- Member, Emory College Information Technology Advising Group (Fall, 2012 and Spring, 2013)
- Member, Emory College Neuroscience Research Committee (Spring and Fall, 2013)
- Executive Committee - Facility for Education & Research in Neuroscience (Spring, 2013 - present)
- Executive Committee – Neuroscience and Behavioral Biology (Fall, 2014 and Spring, 2015)
- Member of the scientific advisory committee of the Atlanta Clinical and Translational Science Institute Clinical Research Network (Spring, 2015)

## **External Service:**

### Editorial Boards

Brain Behavioral and Evolution (Fall, 2009 to present)

Frontiers in Decision Neuroscience (Spring, 2011)

### Grant proposal reviewer:

National Science Foundation

National Institutes of Health

Leakey Foundation

### Manuscript Reviewer:

American Journal of Physical Anthropology

American Journal of Primatology

Behavioral and Brain Sciences

Behavioral Neuroscience

Biological Psychiatry

Brain, Behavior and Evolution

Cerebral Cortex

Comparative Biochemistry and Physiology

Ethos

European Journal of Neuroscience

Evolutionary Anthropology

Frontiers in Decision Neuroscience

Hormones and Behavior

Journal of Cognitive Neuroscience

Journal of Human Evolution

Journal of Neuroscience

Journal of Theoretical Biology

NeuroImage

Neuron

Neuropsychologia

Neuropsychopharmacology

Proceedings of the National Academy of Sciences

Psychoneuroendocrinology

Social, Cognitive and Affective Neuroscience

Science

## **RESEARCH EXPERIENCE:**

2009

Sabbatical at Oxford University, UK. Additional training in analysis of diffusion tensor imaging data at the Oxford Centre for Functional Magnetic Resonance Imaging of the Brain using the package FSL.

- 2005 Training in analysis of Diffusion Tensor Imaging data at the Oxford Centre for Functional Magnetic Resonance Imaging of the Brain using the package FSL.
- 2001-2002 Training in fMRI image acquisition (Siemens Allegra 3T magnet) and analysis (Brain Voyager software) at the Center for the Study of Brain, Mind and Behavior, Princeton University
- 2000-2001 Training from personnel in Emory University Departments of Psychiatry and Radiology in fMRI data collection (Philips Integra 1.5 T) and analysis (SPM 99). Served as Principle Investigator for three fMRI experiments where responsibilities included study design, data collection and data analysis.
- 1998-2000 Training from personnel in the Emory Center for PET in Automated Image Registration (AIR) software for analysis of Positron Emission Tomography brain imaging data. Served as PI in one non-human primate PET imaging experiment, and analyzed two other non-human primate PET data sets.
- 1998-1999 Training from the veterinary staff at the Yerkes Regional Primate Research Center in transport, handling, sedation and blood collection of rhesus monkeys
- 1997-1998 Performed more than 50 whole-brain structural MRI scans on anesthetized non-human primate subjects from the Yerkes Regional Primate Research Center.
- 1996 Training from staff at Emory University Hospital in the operation of the Philips NT 1.5 T Magnetic Resonance scanner, and in use of the accompanying software program for image analysis (“Easyvision”).
- 1993-1995 Training and independent research at the Laboratory for Comparative Human Biology, Emory University which involved experience with radioimmunoassays, fluorometric assays, and enzyme-linked immunosorbent assays used to measure analytes in serum, whole blood spots and saliva samples. Assisted in several ongoing studies aimed at explaining variation in endocrine function both among and with human populations.
- 1991-1992 Training and independent research at the Wisconsin Regional Primate Research Center which involved experience with immunocytochemistry and in situ hybridization to localize placental hormones and their mRNA transcripts to specific cells within the primate placenta.