

Elizabeth M. Brannon, Assistant Professor, Psychological & Brain Sciences and Internal Scientific Advisory Committee



Contact Info:

+1 919 668 6201, +1 919 668 0437

brannon@duke.edu

Education:

- PhD, Columbia University, 2000
- M.A., Columbia University, 1994
- B.A. (summa cum laude with distinction in the major), University of Pennsylvania, 1992

Research Interests: *Development and Evolution of Numerical Abilities*

Current projects: Number and time discrimination in infants, Electrophysiological correlates of timing and counting in human infants, Psychophysics of numerical discrimination in monkeys and lemurs, Electrophysiology of number representation in monkeys, Neural correlates of number in adults and children, using fMRI

Dr. Brannon's research program examines the evolution and development of quantitative cognition. She studies how number, time, and spatial extent are represented by adult humans, infants, young children and nonhuman animals without language. With her collaborators at Duke she applies behavioral techniques, Event-related potentials, functional magnetic resonance imaging, and single-unit physiology to explore the cognitive and neural underpinnings of numerical cognition in nonhuman primates and throughout the human lifespan.

Curriculum Vitae

Representative Publications ([More Publications](#))

1. Jordan, K.E., MacLean, E., & Brannon, E.M.. "Monkeys match and tally quantities across senses." *Cognition* 108.3 (2008): 617-625.
2. Brannon, E.M., Libertus, M. Meck, W.H., Woldorff, M.. "Electrophysiological measures of time processing in infant and adult brains: Weber's law holds." *Journal of Cognitive Neuroscience* 20.2 (2008): 193-203.
3. Cordes, S., Brannon, E.M. "The difficulties of representing continuous extent in infancy: Using number is just easier." *Child Development* 79.2 (2008): 476-489.
4. Cantlon, J.F. & Brannon, E.M.. "Basic math in monkeys and college students." *PLoS Biology* 5.12 (2007): e328.
5. Roitman, J., Brannon, E.M. & Platt, M.L.. "Monotonic coding of numerosity in Macaque lateral intraparietal area." *PLoS Biology* 5.8 (2007): e208.

6. Brannon E.M., Suanda, U., Libertus, K. "Temporal discrimination increases in precision over development and parallels the development of numerosity discrimination." *Developmental Science* 10.6 (2007): 770-777.
7. Brannon, E.M.. "The representation of numerical magnitude." *Current Opinion in Neurobiology* 16 (2006): 222-229.
8. Cantlon, J., & Brannon, E.M., Carter, E.J., & Pelphey, K.. "Functional imaging of numerical processing in adults and 4-y-old children." *PLOS Biology* 4.5 (2006): e125.