



## Rebecca Saxe

### *Academic Positions*

2015 - present	MIT, Brain and Cognitive Sciences	Professor
2011 - 2015	MIT, Brain and Cognitive Sciences	Associate Professor
2006 - 2011	MIT, Brain and Cognitive Sciences	Assistant Professor
2003 - 2006	Harvard University, Society of Fellows	Junior Fellow

### *Degrees and Education*

2000 - 2003	MIT, Cambridge MA PhD in Cognitive Science, Best Thesis Award
1997 - 2000	Oriel College, Oxford University, Oxford, UK BA in Psychology and Philosophy, Congratulatory First

### *Awards (selected)*

2017	BCS Awards for Excellence: in Graduate Mentoring; and in Undergraduate Teaching
2015	Arthur C Smith Award for dedication to student life and learning, MIT
2014	Troland Award, National Academy of Sciences
2012	Chosen as a World Economic Forum Young Global Leader
2011	Doc Edgerton Junior Faculty Achievement award, MIT
2010	Young Investigator Award, Society for Experimental Psychology
2010	School of Science Prize for Undergraduate Teaching, MIT
2009	American Psychological Association Robert L. Fantz Award for Young Psychologists
2009	BCS Award for Excellence in Undergraduate Teaching, MIT
2008	Cognitive Neuroscience Society Young Investigator Award
2008	Popular Science "Brilliant 10" scientists under 40.
2004	MIT Department of Brain and Cognitive Sciences Outstanding Thesis award
2000	Best performance, Honour School of Psychology, Philosophy and Physiology, Oxford

### *Impact*

[http://en.wikipedia.org/wiki/Rebecca\\_Saxe](http://en.wikipedia.org/wiki/Rebecca_Saxe)

2012 Scientific American profile: <http://www.nature.com/scientificamerican/journal/v307/n6/full/scientificamerican1212-74.html>

2009 TED talk (currently 2.5 million views, translated into 31 languages)

Total Citations: >14,000; h-index: 58, i10-index: 102; Research Support: >\$6 million

### ***Publications – Journal Articles***

1. Saxe, R., & Houlihan, S. D. (2017). Formalizing emotion concepts within a Bayesian model of theory of mind. *Current Opinion in Psychology*.
2. Kleiman-Weiner, M., Saxe, R., & Tenenbaum, J. B. (in press). Learning a commonsense moral theory. *Cognition*.
3. Deen, B., Richardson, H., Dilks, D. D., Takahashi, A., Keil, B., Wald, L. L., Kanwisher N, & Saxe, R. (2017). Organization of high-level visual cortex in human infants. *Nature Communications*, 8, 13995.
4. Bruneau, E. G., Cikara, M., & Saxe, R. (in press). Parochial empathy predicts reduced altruism and the endorsement of passive harm. *Social Psychological and Personality Science*
5. Baker, CL, Jara-Ettinger, J, Saxe, R, Tenenbaum, J.B. (2017) Rational quantitative attribution of beliefs, desires, and percepts in human mentalizing, *Nat. Hum. Behav.*
6. Anzellotti, S., Kliemann, D., Jacoby, N., & Saxe, R. (2017). Directed network discovery with dynamic network modelling. *Neuropsychologia*, 99, 1-11.
7. Kliemann, D., Jacoby, N., Anzellotti, S., & Saxe, R. R. (2016). Decoding task and stimulus representations in face-responsive cortex. *Cognitive Neuropsychology*, 1-16.
8. Jacoby, N., Bruneau, E., Koster-Hale, J., & Saxe, R. (2016). Localizing Pain Matrix and Theory of Mind networks with both verbal and non-verbal stimuli. *NeuroImage*, 126, 39-48.
9. Chakroff, A., Dungan, J., Koster-Hale, J., Brown, A., Saxe, R., & Young, L. (2016). When minds matter for moral judgment: intent information is neurally encoded for harmful but not impure acts. *Social cognitive and affective neuroscience*, nsv131, 476–484
10. Bruneau, E. G., Cikara, M., & Saxe, R. (2015). Minding the Gap: Narrative Descriptions about Mental States Attenuate Parochial Empathy. *PloS one*, 10(10), e0140838.
11. Bedny, M., Richardson, H., Saxe, R., (2015) "Visual" Cortex Responds to Spoken Language in Blind Children. *Journal of Neuroscience* 35(33):11674 –11681
12. Skerry, A.E., Saxe, R., (2015) Neural Representations of Emotion Are Organized around Abstract Event Features. *Current Biology* 25 (15), 1945-1954
13. Open Science Collaboration (2015). Estimating the reproducibility of psychological science. *Science*, 349(6251). DOI: 10.1126/science.aac4716
14. Deen, B., Koldewyn, K., Kanwisher, N., Saxe, R., (2015) Functional Organization of Social Perception and Cognition in the Superior Temporal Sulcus. *Cerebral Cortex*
15. Bruneau, E., Jacoby, N., Saxe, R., (2015) Empathic control through coordinated interaction of amygdala, theory of mind and extended pain matrix brain regions. *NeuroImage* 114: 105-119
16. Spunt, R.P., Elison, J.T., Dufour, N., Hurlmann, R., Saxe, R., Adolphs, R., (2015) Amygdala lesions do not compromise the cortical network for false-belief reasoning. *PNAS* 112 (15), 4827-4832

17. Deen, B., Saxe, R., Bedny M., (2015) Occipital Cortex of Blind Individuals Is Functionally Coupled with Executive Control Areas of Frontal Cortex. *Journal of Cognitive Neuroscience*. 7(8) 1633-1647
18. Osher, D.E., Saxe, R., Koldewyn, K., Gabrieli, J.D.E., Kanwisher, N., Saygin, Z. (2015) Structural Connectivity Fingerprints Predict Cortical Selectivity for Multiple Visual Categories across Cortex. *Cerebral Cortex*.
19. Skerry, A. E., & Saxe, R. (2014). A Common Neural Code for Perceived and Inferred Emotion. *Journal of Neuroscience*, 34(48), 15997-16008.
20. Phillips, J., Ong, D., Surtees, A., Xin, Y., Williams, S., Saxe, R., & Frank, M. (in press) A second look at automatic false belief representation: Reconsidering Kovács, Téglás, and Endress (2010). *Psychological Science*.
21. Cikara, M., Bruneau, E., Van Bavel, J. J., & Saxe, R. (2014). Their pain gives us pleasure: How intergroup dynamics shape empathic failures and counter-empathic responses. *Journal of experimental social psychology*, 55, 110-125.
22. Jenkins AC, Dodell-Feder D, Saxe R, Knobe J (2014) The Neural Bases of Directed and Spontaneous Mental State Attributions to Group Agents. *PLoS ONE* 9(8): e105341.
23. Koster-Hale J, Bedny M, Saxe R (2014) Thinking about Seeing: perceptual sources of knowledge are encoded similarly in the theory of mind brain regions of sighted and blind adults. *Cognition*. 133 (1), 65-78
24. Cikara M, Jenkins A, Dufour N, Saxe R (2014) Reduced self-referential neural response during intergroup competition predicts competitor harm. *Neuroimage*. 96, 36-43
25. Koldewyn K, Yendiki A, Weigelt S, Gweon H, Julian J, Richardson H, Mallow C, Saxe R, Fischl B, & Kanwisher, N. (2014). Differences in the right inferior longitudinal fasciculus but no general disruption of white matter tracts in children with autism spectrum disorder. *PNAS* 111 (5), 1981-1986
26. Andrews-Hanna JR., Saxe R, Yarkoni T. (2014). Contributions of episodic retrieval and mentalizing to autobiographical thought: Evidence from functional neuroimaging, resting-state connectivity, and fMRI meta-analyses. *NeuroImage*. 91, 324-335
27. Bedny M, Dravida S, Saxe R (2014) Shindigs, Brunches, and Rodeos: The Neural Basis of Event Words. *Cognitive, Affective, and Behavioral Neuroscience*. 14(3) 891-901
28. Koster-Hale J, Saxe R (2013) Theory of Mind: a neural prediction problem. *Neuron*. 79:836-848
29. Dufour N, Redcay E, Young L, Mavros PL, Moran JM, Triantafyllou C, Gabrieli JDE, Saxe R (2013) Similar brain activation during false belief tasks in a large sample of adults with and without Autism. *PLoSOne* 8(9): e75468.
30. Dravida S, Saxe R, Bedny M (2013) People can understand descriptions of motion without activating visual motion brain regions. *Frontiers in language sciences*. 4:537
31. Koster-Hale J, Saxe R, Dungan J, Young LY (2013). Decoding moral judgements from neural representations of intentions. *PNAS*. 110(14): 5648–5653

32. Bruneau E, Dufour N, Saxe R (2013) How We Know It Hurts: Item Analysis of Written Narratives Reveals Distinct Neural Responses to Others' Physical Pain and Emotional Suffering. *PLoSOne*. 8(4): e63085. doi:10.1371/journal.pone.0063085
33. Gibson E, Piantadosi S, Brink K, Bergen L, Lim E, Saxe R (2013) A noisy-channel account of cross-linguistic word order variation. *Psychological Science*. 24:1079-1088
34. Frank M, Saxe R (2012) Teaching replication. *Perspectives in Psychological Science* 7:600-604
35. Redcay E, Kleiner M, Saxe R (2012) Look at this: the neural correlates of initiating and responding to bids for joint attention. *Frontiers in Neuroscience* 6:1-14
36. Bruneau E, Saxe R (2012) The power of being heard: the benefits of 'perspective-giving' in the context of intergroup conflict. *Journal of Experimental Social Psychology* 48(4): 855–866
37. Redcay E, Dodell-Feder D, Mavros PL, Kleiner M, Pearrow M, Triantafyllou C, Gabrieli J, Saxe R (2013) Atypical brain activation patterns during a face-to-face joint attention game in adults with autism spectrum disorder. *Human Brain Mapping*. 34(10):2511-23
38. Bedny M, Pascual-Leone A, Dravida S, Saxe R (2012) A sensitive period for language in the visual cortex: Distinct patterns of plasticity in congenitally versus late blind adults. *Brain and Language*. 122(3):162-70.
39. Bedny M, Saxe R (2012) Insights into the origins of knowledge from the cognitive neuroscience of blindness. *Cognitive Neuropsychology*. 29(1-2):56-84.
40. Dungan J, Saxe R (2012) Matched False-Belief Performance During Verbal and Nonverbal Interference. *Cognitive Science*. 36(6):1148-56
41. Gweon H, Dodell-Feder D, Bedny M, Saxe R (2012) Theory of Mind performance in children correlates with functional specialization of brain regions recruited for thinking about thoughts. *Child Development*. 83(6):1853-68
42. Frank MC, Vul E, Saxe R. (2012). Measuring the Development of Social Attention Using Free-Viewing. *Infancy*. 17(4):355-75
43. Balas, B., Kanwisher, N., Saxe, R.(2012) Thin-slice perception develops slowly. *Journal of Experimental Child Psychology*. 112(2):257-264
44. Bruneau E, Dufour N, Saxe R (2012) Social cognition in members of conflict groups: behavioural and neural responses in Arabs, Israelis and South Americans to each other's misfortunes. *Philos Trans R Soc Lond B Biol Sci*. 367(1589):717-30
45. Frank M, Fedorenko E, Lai P, Saxe R, Gibson E (2012) Verbal interference suppresses exact numerical representation. *Cognitive Psychology* 64(1-2):74-92
46. Bruneau E, Pluta A, Saxe R (2012) Distinct roles of the 'Shared Pain' and 'Theory of Mind' networks in processing others' emotional suffering. *Neuropsychologia* 50(2): 219-31
47. Bedny M, Caramazza A, Pascual-Leone A, Saxe R. (2012) Typical neural representations of action verbs develop without vision. *Cerebral Cortex*. 22(2): 286-293

48. Saygin Z, Osher DE, Koldewyn K, Reynolds G, Gabrieli JDE, Saxe R (2011) Anatomical connectivity patterns predict face-selectivity in the fusiform gyrus. *Nature Neuroscience*. 15(2):321-7
49. Pitcher D, Dilks D, Saxe R, Triantafyllou C, Kanwisher N (2011) Differential selectivity for dynamic versus static information in face-selective cortical regions. *Neuroimage*. 56(4):2356-63
50. Cikara M, Bruneau E, Saxe R (2011) Us and Them: Intergroup failures of empathy. *Current Directions in Psychological Science*. 20(3):149-53
51. Young L, Saxe R. (2011). When ignorance is no excuse: Different roles for intent across moral domains. *Cognition*. 120(2) 149-298.
52. Bedny M, Pascual-Leone A, Dodell-Feder D, Fedorenko E, Saxe R. (2011) Language processing in the occipital cortex of congenitally blind adults. *PNAS*. 108(11): 4429-4434
53. Dodell-Feder D, Koster-Hale J, Bedny M, Saxe R (2011) fMRI item analysis in a theory of mind task. *Neuroimage*. 55(2), 705-12
54. Moran JM, Young L, Saxe R., Lee SM, O'Young D, Mavros P, Gabrieli J (2011). Impaired theory of mind for moral judgement in high-functioning autism. *PNAS*. 108(7) 2688-2692
55. Whitfield-Gabrieli S, Moran JM, Nieto-Castanon A, Triantafyllou C, Saxe R, Gabrieli J (2011) Associations and dissociations between default and self-reference networks in the human brain. *Neuroimage*. 55(1) 225-32
56. Young L, Scholz J, Saxe R (2011) Neural evidence for “intuitive prosecution”: the use of mental state information for negative moral verdicts. *Social Neuroscience*.
57. Bedny M, Konkle T, Pelphrey K, Saxe R, Pascual-Leone A (2010) Sensitive period for a multi-modal response in human MT/MST. *Current Biology*. 20(21), 1900-6
58. Bruneau E, Saxe R (2010) Attitudes towards the outgroup are predicted by activity in the precuneus in Arabs and Israelis. *Neuroimage*. 52(4), 1704-11
59. Young L, Dodell-Feder D, Saxe R. (2010). What gets the attention of the temporo-parietal junction? An fMRI investigation of attention and theory of mind. *Neuropsychologia* 48, 2658–64
60. Young L, Camprodon JA, Hauser M, Pascual-Leone A, Saxe R (2010) Disruption of the right temporo-parietal junction with transcranial magnetic stimulation reduces the role of beliefs in moral judgments. *PNAS*, 107(15), 6753-8
61. Redcay E, Dodell-Feder D, Pearrow MJ, Mavros PL, Kleiner M, Gabrieli JDE, Saxe R (2010) Live face-to-face interaction during fMRI: A new tool for social cognitive neuroscience. *NeuroImage*. 50(4), 1639-1647
62. Young L, Nichols S, Saxe R (2010) Investigating the neural and cognitive basis of moral luck: It's not what you do but what you know. *Review of Philosophy and Psychology*.

63. Baraff-Bonawitz E, Ferranti D, Saxe R, Gopnik A, Meltzoff AN, Woodward J, Schulz LE (2010) Just do it? Investigating the gap between prediction and action in children's causal inferences. *Cognition*. 115, 104-117
64. Baker CI, Saxe R, Tenenbaum JB (2009) Action understanding as inverse planning. *Cognition* 113(3):329-49
65. Saxe R, Whitfield-Gabrieli S, Scholz J, Pelphrey K. (2009). Brain Regions for Perceiving and Reasoning about Other People in School-aged Children. *Child Development* 80(4): 1197-1209
66. Bedny M, Pascual-Leone A, Saxe R. (2009) Growing up blind does not change the neural bases of Theory of Mind. *PNAS*. 106(27): 11312-7.
67. Young L, Saxe R. (2009) Innocent Intentions: A correlation between forgiveness for accidental harm and neural activity. *Journal of Cognitive Neuroscience*. 47(10):2065-72
68. Young L, Saxe R. (2009). An fMRI investigation of spontaneous mental state inference for moral judgement. *Journal of Cognitive Neuroscience*. 21(7):1396-1405.
69. Scholz J, Triantafyllou C, Whitfield-Gabrieli S, Brown EN, Saxe R. (2009). Distinct regions of right temporo-parietal junction are selective for theory of mind and exogenous attention. *PloS One* 4(3)
70. Bedny M, Caramazza A, Grossman E, Pascual-Leone A, Saxe R (2008). Concepts are more than percepts: the case of action verbs. *Journal of Neuroscience* 28(44):11347-53.
71. Kliemann D, Young L, Scholz J, Saxe R (2008) The influence of prior record on moral judgment. *Neuropsychologia*. 46: 2949–2957
72. Young L, Saxe R (2008). The neural basis of belief encoding and integration in moral judgment. *Neuroimage*.40(4): 1912-1920
73. Young L, Cuhsmann F, Hauser M, Saxe R (2007) The neural basis of the interaction between theory of mind and moral judgment. *PNAS* 104(20):8235-40.
74. Saxe R, Tzelnic T, Carey S (2007) Knowing who-dunnit: infants infer the agent of an unseen causal interaction. *Developmental Psychology* 43(1):149-58
75. Saxe R, Schulz LE, Jiang YV (2006) Reading Minds versus Following Rules: Dissociating Theory of Mind and Executive Control in the Brain. *Social Neuroscience*. 1(3-4):284-98
76. Saxe R, Moran JE, Scholz J, Gabrieli J (2006) Overlapping and non-overlapping brain regions for theory of mind and self reflection in individual subjects. *Social Cognitive and Affective Neuroscience*. 1(3):229-34
77. Saxe R, Carey S (2006) The perception of causality in infancy. *Acta Psychologica* 123(1-2): 144-65
78. Saxe, R. & Powell L. (2006) It's the thought that counts: specific brain regions for one component of Theory of Mind. *Psychological Science* 17(8):692-9
79. Saxe R (2006) Why and how to use fMRI to study Theory of Mind. *Brain Research*. 1079(1):57-65
80. Saxe R (2006) Uniquely Human Social Cognition. *Current Opinion Neurobiology* 16(2): 235-9

81. Saxe R, Brett M, Kanwisher N (2006) Divide and conquer: a defense of functional localisers. *Neuroimage*. 30(4):1088-96
82. Saxe R, Tzelnic T, Carey S. (2006) Five-month-old infants know that humans are solid, like inanimate objects. *Cognition* 101(1):B1-8
83. Saxe R, Jamal N, Powell L (2006) My body or yours? The effect of visual perspective on cortical body representation. *Cerebral Cortex* 16(2):178-82
84. Saxe R, Tenenbaum J, Carey S. (2005) Secret Agents: 10- and 12-month-old infants' inferences about hidden causes. *Psychological Science* 16(12):995-1001
85. Saxe R. (2005) Against Simulation: the Argument from Error. *Trends in Cognitive Science* 9(4):174-9; and Saxe R. (2005) Tuning forks in the mind: Reply to Goldman & Sebanz. *Trends in Cognitive Science*; and Saxe R. (2005) On ignorance and being wrong: Reply to Gordon. *Trends in Cognitive Science*, and Saxe, R (2005) Hybrid Vigour: Reply to Mitchell. *Trends in Cognitive Science*.
86. Heberlein A, Saxe R. (2005) Dissociation between Emotion and Personality Judgements: Convergent evidence from functional neuroimaging. *NeuroImage* 28(4):770-7
87. Saxe R, Wexler A (2005) Making sense of another mind: the role of the right temporoparietal junction *Neuropsychologia* 43(10):1391-9
88. Howard IP, Hu G, Saxe R, James EZ. (2005) Visual orientation in a mirror world tilted 90 degrees. *Perception* 34(1):7-15.
89. Saxe R, Xiao DK, Kovacs G, Perrett DI, Kanwisher N (2004) A region of right posterior superior temporal sulcus responds to observed intentional actions. *Neuropsychologia* 42(11):1435-46
90. Jiang Y, Saxe R, Kanwisher N (2004) Functional magnetic resonance imaging provides new constraints on theories of the psychological refractory period *Psychological Science* 15(6):390-6
91. Saxe R, Carey S, Kanwisher N (2004) Understanding other minds: linking developmental psychology and functional neuroimaging *Annual Review of Psychology* 55:87-124
92. Saxe R, Kanwisher N (2003) People thinking about thinking people: fMRI studies of Theory of Mind. *Neuroimage*. 19(4):1835-42; reprinted in (Ed J Cacioppo & G. Bernston) *Social Neuroscience*. New York: Psychology Press

***Publications — Peer-Reviewed Conference Papers***

93. Anzellotti S, Houlihan SD, Saxe R (CCN 2017) Nonlinear Statistical Dependence Outperforms Linear Dependence in Bayesian Inferences about the Neural Networks Underlying Simulated fMRI Data
94. Campero A, Felbo B, Tenenbaum J, Saxe R (CCN 2017) First Step in Combining Cognitive Event Features and Natural Language Representations to Predict Emotions

95. Deen, B., Kanwisher, N., & Saxe, R. (VSS 2014). Exploring the functional organization of the superior temporal sulcus with a broad set of naturalistic stimuli.
96. Deen, B. & Saxe, R. (CogSci 2012). Neural correlates of social perception: The posterior superior temporal sulcus is modulated by action rationality, but not animacy.
97. Koster-Hale, J., Dungan, J., Saxe, R., & Young, L. (CogSci 2012). Thinking in Patterns: using multi-voxel pattern analyses to find neural correlates of moral judgment in neurotypical and ASD populations.
98. Dufour, N., Redcay, R., Young, L., Mavros, P., Moran, J., Triantafyllou, C., Gabrieli, J., & Saxe, R. (CogSci 2012). What explains variability in brain regions associate with Theory of Mind in a large sample of neurotypical adults and adults with ASD?
99. Richardson, H., Baker, C., Tenenbaum, J., & Saxe, R. (Cog Sci 2012). The Development of Joint Belief-Desire Inferences.
100. Ichinco, D., Frank, M. C., & Saxe, R. (CogSci 2009). Cross-situational word learning respects mutual exclusivity.
101. Baker C., Tenenbaum J., & Saxe R. (CogSci 2007) Goal inference as inverse planning.
102. Baker C., Tenenbaum J., & Saxe R. (NIPS 2006) Bayesian models of perceiving intentional action

***Publications – Chapters and Editorials***

103. Richardson, H., & Saxe, R. (2016). Using MRI to study developmental change in theory of mind. in *Social Cognition: Development Across the Life Span*, 210.
104. Skerry, A. E., & Saxe, R. (2016). What neuroscience can reveal about cognition and its origins. in *Core Knowledge and Conceptual Change*, 321.
105. Saxe, R (2016) The moral status of accidents. *PNAS commentary*
106. Saxe R, Young L (2014) Theory of Mind: How brains think about thoughts. In the *Handbook of cognitive neuroscience*.
107. Koster-Hale J, Saxe R (2013) Functional Neuroimaging of Theory of Mind. In Baron-Cohen, Lombardo & Tager-Flusberg (Ed) *Understanding Other Minds*, 3rd Ed.
108. Saxe R (2013) The new puzzle of Theory of Mind development. In *Navigating the Social World: What Infants, Children, and Other Species Can Teach Us*. Ed: M Banaji & S Gelman.
109. Redcay E & Saxe R (2013) Do you see what I see? The neural bases of joint attention *Agency and Joint Attention*. Ed: J Metcalfe & H Terrace. Oxford University Press.
110. Saxe R (2012) How should we manage peer review and why? Commentary on Nosek & Bar-Anan (2012) *Psychological Inquiry* 23(3):301-302
111. Gweon H & Saxe R (2012) Developmental cognitive neuroscience of ToM: when everything we thought we knew is wrong. In *Developmental Neuroscience* Ed: P Rakic & J Rubenstein, Academic Press
112. Saxe R (in press) The right temporo-parietal junction: a specific brain region for thinking about thoughts. *Handbook of Theory of Mind*. Ed: A Leslie & T German



113. Saxe R & Pelphrey K (2009) Introduction to a Special Section of Developmental Social Cognitive Neuroscience. *Child Development* 80(4):946-51.
114. Saxe R & Offen S (2009) Seeing ourselves: what vision can teach us about metacognition. In Ed (G Dimaggio, PH Lysaker). *Metacognition and Severe Adult Mental Disorders: From basic research to treatment*.
115. Saxe R (2009) The happiness of the fish: evidence for a common theory of one's own and others' actions. In Ed (K Markman, B Klein, J Suhr). *The Handbook of Imagination and Mental Simulation*.
116. Saxe R (2009) Theory of Mind (Neural Basis). *Encyclopedia of Consciousness*.
117. Saxe R (2007) What was I thinking? Developmental and neural connections between Theory of Mind, Memory and the Self. *Attention and Performance*. XXII. Ed. Y. Rossetti, P. Hagard, M. Kawato.
118. Saxe R (2005) Four brain regions for one theory of mind? In (Ed. J Cacioppo) *People thinking about People*. Cambridge: MIT Press.

***Publications — Public Essays and Book Reviews***

119. Saxe R (2013) Learning from Students. *MIT Faculty Newsletter* XXV(5)
120. Young L, Saxe R (2010) It's not just what you do, but what's on your mind: a review of Kwame Anthony Appiah's 'Experiments in Ethics'. *Neuroethics*.
121. Saxe R (2009) The neural evidence for Simulation is weaker than I think you think it is. *Book Symposium on 'Simulating Minds' in Philosophical Studies*.
122. Saxe R (2008) If a brain breaks, can it be fixed? Review of Normal Doidge's *The brain that changes itself*. *Literary review of Canada*
123. Saxe R (2008) Commentary on 1985 paper on Theory of Mind. *Simons Foundation*
124. Saxe R, Haushofer J (2008) For love or Money: a common neural currency for Social and Monetary Reward. *Neuron*. 58, 164-5.
125. Saxe R (2007) Fantasies that Coincide with Reality. Review of C Frith's 'Making up the Mind.' *Trends in Cognitive Sciences*
126. Saxe R (2007) How to fill a jury box: race matters. *Mind Matters Scientific American blog*.
127. Saxe R, Schulz LE (2006) Why we read literary criticism: review of L Zunshine's 'Why we read fiction: Theory of Mind and the novel'. *Trends in Cognitive Sciences*
128. Saxe R (2006) The Forbidden Experiment. *Boston Review*
129. Saxe R (2006) The Forbidden Experiment. *Literary Review of Canada*
130. Saxe R (2005) But we were feeling happy: review of K Oatley's 'Emotions: A Brief History'. *Literary Review of Canada*
131. Saxe R (2005) Do the right thing. *Boston Review*
132. Saxe R (2004) Reading your mind. *Boston Review*.

***Publications - Edited Book***

Saxe R, Baron-Cohen S (2007) *Theory of Mind*. Psychology Press.

<b>Major Research Support</b>		(Direct funds only)
2016-2019	PI	“Neural measures of social reward and information value in infants”
	<i>NSF</i>	\$600,000
2015-2017	co-PI	“Language Pragmatics – Targeted Project”
	<i>Simons Center for the Social Brain</i>	\$222,011
2012-2017	PI	“Impairments of Theory of Mind disrupt patterns of brain activity”
	<i>NIH RO1</i>	\$629,160
2012-2014	PI	“Neurobiology of Narrative Influence in Inter-group Conflict”
	<i>DARPA</i>	\$831,191
2011-2012	PI	“Development of cross modal plasticity in occipital cortex of blind children”
	<i>Harvard NeuroDiscovery Center</i>	\$75,000
2010-2015	PI	“Typical and atypical development of brain regions for Theory of Mind”
	<i>NSF CAREER</i>	\$446,067
2009-2013	PI	“Neural measures of inter-group conflict”
	<i>Office of Naval Research</i>	\$666,807
2008-2013	PI	“Neural mechanisms of human social cognition”
	<i>Packard Foundation</i>	\$875,000
2008 -2011	PI	“Neural Basis of Social Cognition in ASD”
	<i>Simons Foundation</i>	\$684,505.
2008-2009	PI	“Neural mechanisms of de-radicalisation: pilot studies”
	<i>Alliance of Civilizations Media Fund</i>	\$100,000
2007-2012	Co-PI	“Autism and Dylexia Project”
	<i>Ellison Medical Foundation</i>	\$650,097
2007 - 2011	PI	“Neural Basis of Theory of Mind in Typical Development and Autism”
	<i>John Merck Scholars Program</i>	\$300,000.

### ***Teaching***

- 9.61 Laboratory in Higher Level Cognition (Undergraduate Lab; 2008, 2009, 2010, 2011, 2013)
- 9.46 Neuroscience of Morality (Upper-level Undergraduate course, 2012, 2014, 2015, 2016)
- 9.916 Social Animals (Graduate Seminar; 2009)
- 9.914 Explorations in Exploration (Graduate Seminar, with Laura Schulz; 2010).
- 9.915 Developmental Cognitive Neuroscience (Graduate Seminar, with Marina Bedny 2008, with Susan Carey 2012)
- 9.914 fMRI for Cognitive Neuroscientists (Graduate Lecture Course, with Nancy Kanwisher 2011, 2014).
- 9.913 Emotion (Graduate Seminar, with Laura Schulz, 2017)

### ***Undergraduate Theses Supervised (Harvard University)***

Lindsey Powell, 2006 Hoopes Prize  
Roy Cohen, 2010 Hoopes Prize

### ***Graduates Students (Primary Mentor):***

Liane Young, Harvard University (with Marc Hauser), PhD 2008, current Professor, Boston College.

Zeynep Saygin, MIT (with John Gabrieli), PhD 2012, current Assistant Professor, OSU

Jorie Koster-Hale, MIT, PhD 2014, current data scientist

Ben Deen, MIT (with Nancy Kanwisher), current Post-Doctoral Fellow, Rockefeller University

Hilary Richardson, MIT, current graduate student

Sean Dae Houlihan, MIT, current graduate student

### ***Graduate Thesis Committees:***

Harvard University: Jonathan Beier, Lindsey Powell, Adena Schachner, Amy Skerry

MIT: Elizabeth Bonawitz, Mike Frank, Chris Baker, David Osher, Hyowon Gweon, Todd Thompson, Idan Blank, Julian Jara-Ettinger, Kim Scott, Leon Bergen, Max Kliemann-Weiner, Rachel Magid, Julia Leonard

### ***Postdocs (Primary Mentor)***

Stefano Anzellotti, MIT, current postdoctoral scholar.

Dorit Kliemann, MIT, current postdoctoral scholar

Lindsey Powell, MIT, current postdoctoral scholar.

Emile Bruneau, MIT, current research scientist, UPenn.

Hyowon Gweon, MIT, current Assistant Professor, Stanford University

Marina Bedny, MIT, current Assistant Professor, Johns Hopkins University

Mina Cikara, MIT, current Assistant Professor, Harvard University

Liane Young, MIT, current Professor, Boston College.

Elizabeth Redcay, MIT, current Associate Professor, University of Maryland.

## ***Editorial Roles***

*Social Neuroscience* Associate Editor 2005 –2009  
Guest Editor, Special Issue on Theory of Mind, Fall 2006  
*Brain and Behavioral Sciences* Associate Editor 2009 - 2012  
*Child Development*  
Guest Editor, Section on Social Cognitive Developmental Neuroscience, 2009  
*Social Cognitive and Affective Neuroscience* Associate Editor 2005 – 2007  
*Journal of Experimental Psychology: General* Associate Editor 2010 - 2011  
Ad hoc manuscript reviewer for *Science, Nature, Nature Neuroscience, Nature Neuroscience Reviews, Psychological Science, Cognition, Emotion, Trends in Cognitive Science, Neuropsychologia, Neuron, Journal of Neuroscience, Journal of Cognitive Neuroscience, Child Development, Brain and Language, Perception and Psychophysics, Cognitive Affective and Behavioral Neuroscience, Social Neuroscience*. Ad Hoc grant reviewer for *Economic and Social Research Council (UK), NSF Social Psychology Program (USA)*

## ***Professional Memberships***

Society for Philosophy and Psychology (Executive Board Member, 2007-2010), Cognitive Science Society (2011- ); Cognitive Neuroscience Society (2007- ); Cognitive Development Society (2010- ); Society for Research in Child Development (2007- ); American Psychological Association (2007- ); Society for Neuroscience (2002- ).

## ***Service and committees***

MIT BCS Department Head Search Committee (2008, 2011); MIT President's Distinguished Fellowships Committee (2008, 2009, 2011, 2012; Co-Chair 2014, 2015, 2016, 2017); Cognitive Science Search Committee (2006, 2007, 2008, 2009, 2011, 2015, 2016, Director 2012); MIT Tech Day lecture to Alumni, 'The Mind's Eye' (2009); MIT delegation to the World Economic Forum, Davos Switzerland (2010); MIT Committee on Academic Performance (2012, 2013, 2014, 2015); BCS Education Committee (2012, 2013, 2014, 2015, 2016); BCS Council (2012, 2013, 2014, 2015, 2016); Chancellor's Committee on Student Life (2013); Dean of the School of Science, Search Advisory Committee, Chair (2014); Beyond 2016—MIT's Frontiers of the Future (Co chair, 2016); MIT committee on hospitalization and medical leave, Chair (2016).

NSF cognitive neuroscience review panel (2013); NSF development and learning sciences CAREER review panel (2014); Open Science Collaboration, Reproducibility of Psychological Science Project, participant and grants committee (2012-2015); Harvard Higher Education Leaders Forum (2016); APS Mentorship Award committee (2016); ManyBabies2 Participant (2017).

*Psychology / Neuroscience Invited talks*

Rutgers University, Jan 22, 2002  
NMR imaging centre, MGH, Feb 5, 2003  
Harvard University, Social Neuroscience series, June 9, 2003  
McGovern Institute Retreat, Sep 8, 2003  
Yale University, Sep 29, 2003  
McGovern Institute Symposium, Oct 14, 2003  
Cognitive Neuroscience Center, U.Penn, Nov 3, 2003  
Lab for Developmental Studies, Harvard University, Feb 17, 2004  
Princeton University, May 11, 2004  
University of Chicago, Social Neuroscience conference, May 14, 2004  
Harvard University, Cognition, Brain and Behaviour Seminar, October 21, 2004  
CSHD Colloquium, Brown University, Nov 4, 2004  
Brain and Cognitive Sciences, MIT, Nov 10, 2004  
Department of Psychology, University of Washington, Nov 16, 2004  
I-LABS, University of Washington, Nov 17, 2004  
Stanford University, Dec 8 2004  
Department of Psychology, UC Berkeley, Dec 10, 2004  
Department of Psychology, UC Berkeley, Feb 5 2005  
Rutgers University, Feb 8, 2005  
Harvard University Feb 16, 2005  
Psychology Department, University of Toronto Feb 23, 2005  
University College London, UK, March 4, 2005  
Cognitive Neuroscience, University of Birmingham, Birmingham UK March 7, 2005  
Developmental Psychology, University of Birmingham, Birmingham UK March 8, 2005  
Social-Cognitive-Affective Neuroscience, Princeton, May 17 2006  
Action Paris Conference, France, May 19 2005  
Psychology Department, Queen's University, Canada, Oct 10 2005  
Psychology Department, Wesleyan University, October 19, 2005  
Psychology Department, UMass Boston, November 17 2005  
Psychology Department, NYU, Dec 1, 2005  
Simulation Conference, Paris, Dec 10 2005  
Embodied Simulation conference, Germany, Feb 10 2006  
Attention and Performance XXII Conference, Macon, France, July 7 2006  
Cold Spring Harbor Laboratory, Summer course on Social Neuroscience, July 17 2006  
Department of Brain and Cognitive Sciences Colloquium, MIT, Sep 8, 2006.  
Psychology Department, Yale University, March 7, 2007.  
BU Medical School, October 2007  
Center for Human Growth & Development, University of Michigan, November 2007  
Psychology Department, Stanford, January 2008

Psychology Department, Boston College, January 2008  
Social Psychology Colloquium, Arizona State University, March 2008  
Summer Institute on Social Cognition, UQAM, Montreal, Canada; July 2008  
Center for Theoretical Neuroscience, Columbia University, November 2008  
Psychology Department, UCSB, February 2009  
Neural Decision Making group, Princeton University, March 2009  
Psychology Department, St Andrews University, March 2009  
Functional Imaging Lab, University College London, March 2009  
Behavioural and Cognitive Neuroscience Seminar, Columbia University, October 2009  
Cognition, Brain & Behaviour Seminar, Harvard University, October 2009  
Psychology Department Colloquium, Brandeis University, January 2010  
Allen Edwards Memorial Public Lecture, University of Washington, February 2010  
Department of Psychology Colloquium, University of British Columbia, March 2010  
Developmental Psychology Colloquium, Boston University, April 2010  
Religion & Science Distinguished Lecture in Life Sciences, Penn State U, April 2010  
McDonnell Meeting on Morality and Norms, University of Michigan, May 2010  
ICBS colloquium, UC Berkeley, Sep 2010  
Brain, Mind & Society seminar, CalTech, October 2010  
Distinguished Speaker Series, Institute of Cognitive Science, February 2011  
Psychological and Brain Sciences Colloquium, Johns Hopkins University, March 2011  
Center for Human Development, University of Maryland, March 2011  
Cognitive Science Colloquium, University of Maryland, March 2011  
Psychology department colloquium, University of California San Diego, April 2011  
Implications of Research on the Neuroscience of Affect, Attachment, and Social Cognition,  
Psychoanalysis Unit, UCL, London, May 2011  
MIT 150, Brains Minds and Machines, Cambridge MA, May 2011  
Social Cognitive Development Pre-conference, Child Development Society, October 2011  
Children's Hospital Boston, October 2011  
Psychiatric Genetics and Translational Research Seminar, Mass General Hospital,  
November 2011  
Social Brain Symposium, Royal Academy of Sciences, Brussels, Belgium, November 2011  
Social Neuroscience Workshop, Ghent, Belgium, November 2011  
Mind Perception pre-conference, Society for Personality and Social Psychology, San Diego  
CA, January 2012  
Symposium, Society for Personality and Social Psychology, San Diego CA, January 2012  
Dean's Lectureship, LSU Medical School, New Orleans, LA, January 2012  
Social Lunch, Yale University, October 2012  
Cognitive Science colloquium, York University, January 2013  
American Psychological Society annual meeting, May 2013  
Social Lunch, Harvard University, February 2014

Department of Psychology, and Center for Mind, Brain, and Culture (CMBC), Emory University,  
April 2014  
School of Education, Johns Hopkins University, June 2014  
Keynote Lecture, McKnight foundation for Neuroscience conference, June 2014  
Mind and Brain Distinguished Lecture, Berlin School of Mind and Brain, July 2014  
American Psychological Association, Symposium in honor of Susan Carey, August 2014  
Zangwill Club Lecture, University of Cambridge, UK, September 2014  
Cognition, Brain and Behaviour seminar, Harvard University, October 2014  
Brain and Cognitive Sciences seminar, MIT, October 2014  
Psychology department, UCSD, November 2014  
Psychological and Brain Sciences department, JHU, December 2014  
Summer Institute in Cognitive Neuroscience, UC Santa Barbara, June 2015  
CBMM summer course, Woods Hole, August 2015  
Neuroscience retreat, University of Chicago, September 2015  
Psychology colloquium, Tufts University, September 2015  
Social psychology colloquium, NYU, November 2015  
Stanford psychology department, February 2016  
University of Chicago Psychology department, February 2016  
DIBS, Duke University, March 2016  
American Psychological Society convention, Chicago, May 2016  
Friday Lecture Series, Rockefeller University, October 2016  
Simons Center for the Social Brain, MIT, Dec 2016  
Center for Brains Minds and Machines, MIT Dec 2016  
Colloquium, Psychology Department, Princeton University, Feb 2017  
Wisconsin Symposium on Emotion, March 2017  
Social and Affective Neuroscience Conference, March 2017  
International Conference on Psychological Science, March 2017  
Oxford University, March 2017  
Social and Affective Science Conference, April 2017  
American Psychological Society Conference, May 2017

### *Interdisciplinary Invited Talks*

Harvard University Humanities Centre, March 2, 2005.  
Georgetown Law School, March 13, 2006  
NIL workshop on Theory of Mind and Education. Munich, Germany. October 18 2006.  
Psychology, Morality and Other Minds, Philosophy & Linguistics, MIT. Nov 17, 2006.  
Society for Philosophy and Psychology, St Louis, June 4 2006  
Centre for Humanities, Rutgers University Feb 27, 2006  
AHRC Culture and the Mind workshop, Sheffield University, April 2007  
Center for Humanities, Rutgers University, November 2007

Symposium on Neuroscience and the Law, Santa Barbara, May 2008.  
Symposium on Epistemology, Philosophy Department, University of Toronto, May 2008.  
Society for Philosophy and Psychology, Philadelphia, June 2008  
Evolution of Social Psychology Conference, Yale University, November 2008  
Neural Information Processing Systems, Vancouver BC, Canada, December 2008.  
Recursion: Structural Complexity in Language & Cognition, U.Mass, May 2009.  
Pragmatics Working Group, Linguistics and Philosophy, MIT, May 2009.  
Political Theory Workshop, Stanford University, May 2009.  
United States Institute for Peace, September 2009  
Dubai Film Festival, Cultural Bridges Panel, December 2009.  
World Economic Forum, Davos, January 2010  
Reasoning , Perception and Beliefs in Strategic Settings, Santa Fe Institute, June 2010.  
Implications of Research on Social Neuroscience Conference, Research Department of  
Clinical, Educational and Health Psychology, UCL, May 2011  
The Coevolution of Behaviors and Institutions, Santa Fe Institute, January 2012  
CoSyne, Salt Lake City, Feb 2012  
Cognitive Theory and the Arts, Harvard University, March 2012  
Latin American School on Education, Cognitive and Neural Science, El Calafate, Argentina,  
March 2012  
“Origins of Xenophobia” public panel, Tempe Arizona, March 201  
Sloan School of Business Executive Board meeting, June 2012  
The science of virtual exchange, United States Institute for Peace, October 2012  
Society for Language Development, Symposium speaker, November 2012  
AAAS, February 2013  
Harvard / MIT Joint Program in Neuroscience, February 2014  
Cognition, Neuroscience and the Arts Conference, Brown University, March 2014  
Congressman Fatah’s visit to MIT, April 2014  
Packard Foundation meeting, Monterey CA, September 2014.  
“Bridging Neural Mechanisms and Cognition” FENS Brain conference, Denmark, 2015  
Nestlé International Nutrition Symposium, Lausanne, October 2015  
Building An Inclusive Boston, Beyond Conflict & MIT, October 2016  
The Center for Science and Society, Columbia University, October 2016  
Baltimore Museum of Art, May 2017

**Conferences Hosted:** “Neuroscience and Social Conflict: Defining a New Approach to Conflict in the 21st Century”, co-hosted with the Project for Justice in Times of Transition, at MIT, February 2012.  
“Early development, conceptual change, and continuity: Insights from cognitive neuroscience”, pre-conference of CDS, with Hilary Richardson, October 2015.



*Public communication of science and outreach (selected)*

McKnight Science Journalism Fellows, MIT, 2005, 2007, 2008, 2009, 2010, 2011, 2012, 2014, 2015

MSRP - MIT Summer Research Program for minority / disadvantaged students, 2007, 2015

Commonwealth High School, 2005

Canada/USA MathCamp, 2006, 2007, 2008

Charlie Rose Science Series, Part One: The human brain, 10/31/06

“Ape Genius”, PBS/NOVA, 19/02/08. <http://www.pbs.org/wgbh/nova/apegenius/>

“Of Mice and Women”, New York Times, 26/06/2008

Brilliant 10, Popular Science, 11/2008 <http://www.popsci.com.au/melinda-wenner/article/2008-10/infants-philosopher>

Science Daily May 18 2008, <http://www.sciencedaily.com/releases/2008/05/080515212112.htm>

Rhode Island Judiciary, Newport RI, September 2008

Franklin Institute, Philadelphia PA. Lecture, 2008. Advising on museum exhibit, 2009

“Brain Trust,” Discover Magazine, February 2009 <http://discovermagazine.com/events/unlocking-the-secrets-and-powers-of-the-brain/>

SFARI, Jan 26 2009. <http://sfari.org/news/rebecca-saxe-fine-tuning-the-theory-of-mind>

MIT Science and Engineering Program for Teachers, 2009, 2016

TED, June 2009. [http://www.ted.com/talks/rebecca\\_saxe\\_how\\_brains\\_make\\_moral\\_judgments.html](http://www.ted.com/talks/rebecca_saxe_how_brains_make_moral_judgments.html); TED radio hour 2015.

Dubai Film Festival, Cultural Bridges Panel, December 2009

“The Human Spark: Brain Matters”, PBS, January 20 2010.

Boston Regional Brain Bee, February 2010.

“Big Ideas for Busy People”, Cambridge Science Festival, April 2010

“How the brain works”, NOVA, Feb 2011

MIT 150 ‘Minds and Machines’, Cambridge MA, May 2011

Inside the Psychologists’ Studio, APS, Washington DC, May 2011

“Prophets of Science Fiction, Ep. 107: Robert Heinlein”, Spring 2012

Edge: <http://edge.org/conversation/imaging-conflict-resolution>

Fenway High School Science Project Week, April 2012

The Agenda, TVO, July 2012 <http://ww3.tvo.org/video/179582/rebecca-saxe-brain-vs-mind>

Phi Beta Kappa initiation, MIT, June 2012

New England High School Psychology Teachers extended education, August 2012

Mistui visit to MIT, September 2012

MIT Cape Cod Alumni Association, October 2012

MIT Autism Spectrum Conference, November 2012

Infinite Innovation Symposium in honour of MIT President Rafael Reif, September 2012

“Mind Theorist,” Scientific American, December 2012: <http://www.nature.com/scientificamerican/journal/v307/n6/full/scientificamerican1212-74.html>

“Brains on Trial”, PBS, September 2013

Coalition for National Science Funding Exhibition and Reception on Capitol Hill, May 2013

IDEAS conference, UMass Boston and WBUR, October 2014

Smithsonian Future is Here, May 2015

“Why I Captured This MRI of a Mother and Child”, Smithsonian Magazine December 2015: <http://www.smithsonianmag.com/science-nature/why--captured-MRI-mother-child-180957207/>

TEDx Cambridge “Unlocking our humanity”, June 2016  
<https://www.youtube.com/watch?v=PDefVd8DRxM>

MIT Club of Boston, 2016

Cambridge Science Festival, Big Ideas for Busy People, 2016

“Infant brains reveal how the mind gets built” by Courtney Humphries, Quanta Magazine, *Atlantic Online*, 2017 <https://www.theatlantic.com/science/archive/2017/01/decoding-the-infant-brain/513005/>

MIT Science Museum, Science on Saturdays, “A Peek inside your developing brain”, 2017