

Kim Scott

CONTACT INFORMATION	Bldg 46-4009 77 Massachusetts Ave Cambridge, MA 02139	(617) 324-2888 kimscott@mit.edu
EDUCATION AND EMPLOYMENT	Massachusetts Institute of Technology , Cambridge, MA Research scientist	Oct 2017 - present
	Massachusetts Institute of Technology , Cambridge, MA Ph.D., Brain and Cognitive Sciences Advisor: Laura Schulz	Feb 2018
	California Institute of Technology , Pasadena, CA Research assistant, Lester lab	July 2010 - July 2011
	California Institute of Technology , Pasadena, CA B.S., Engineering and Applied Sciences (Computation and Neural Systems)	June 2010
AWARDS AND FUNDING	NSF Developmental Sciences award 1823919 (\$584,445) “Expanding access to webcam-based online data collection for developmental research” PI: Kim Scott, co-PI: Laura Schulz	2018-2021
	Chan Zuckerberg Initiative, “Reaching Every Reader” project Subcontract for tool development, \$108,956	2018-2019
	Jeff Halis, Lookit platform fund gift (\$100,000)	2017-2018
	American Association of University Women dissertation fellowship (\$20,000)	AY 2016-2017
	NSF Behavioral and Cognitive Sciences award 1429216 (\$369,999) “Lookit: Online interface for large-scale developmental studies” PI: Laura Schulz	2014-2017
	Angus MacDonald Award for Excellence in Undergraduate Teaching, MIT	2013, 2015
	National Science Foundation Graduate Research Fellowship	2013-2016
	Ida M. Green Fellowship, MIT	AY 2011-2012
	Perpall Speaking Competition: Finalist, Caltech	2009
	Perpall Speaking Competition: 3rd place, Caltech	2008
	Axline scholar (full merit scholarship), Caltech	2006-2010
	Lingle scholar (additional merit-based stipend offered to 1-2 incoming students), Caltech	2006-2010
	Intel Science Talent Search: 10th place nationally	2006
TECHNICAL SKILLS	Code: https://github.com/kimberscott Web development languages and frameworks: Javascript, CSS, HTML, Django, Ember.js, PostgreSQL Stimuli creation, data analysis, modeling: Python (PyMC3, Numpy, SciPy, Matplotlib), MATLAB (PsychToolbox), R, ffmpeg, OpenBUGS Source control, documentation: Git, GitHub, Sphinx, RST, Markdown Some exposure: Java, C, Assembly, LISP (Scheme), L ^A T _E X	

RESEARCH
EXPERIENCE

Massachusetts Institute of Technology, Cambridge, MA

Graduate student

2011 - 2017

Research on the structure and development of early conscious experience; development of an online system to allow parents to participate in developmental research from home: <https://lookit.mit.edu>

California Institute of Technology, Pasadena, CA

Research assistant, Lester lab

2010 - 2011

Developed spike sorting software in MATLAB for use on long-term microelectrode recordings in behaving mice. Designed statistical methods to characterize quality of recordings from new 64-channel neural probes and sources of variation in signals.

Amgen scholar, Lester lab

Summer 2009

Developed method to segregate pixels of fluorescence resonance energy transfer (FRET) images based on probable similarity of stoichiometric composition.

Richter scholar, Lester lab

Summer 2008

Investigated the effect of nicotine on neuronal firing patterns in subthalamic nucleus by analyzing electrophysiological data from human Parkinsons patients undergoing implantation of stimulating electrodes.

PAPERS

*Sheskin, M., *Scott, K., Mills, C. M., Bergelson, E., Bonawitz, E., Spelke, E. S., ... Schulz, L. (2020). Online developmental science to foster innovation, access, and impact. *Trends in Cognitive Sciences*, 24(9), 675-678. <https://doi.org/10.1016/j.tics.2020.06.004>

Scott, K. M. and Kline, M. (2019). *Enabling confirmatory secondary data analysis by logging data 'checkout'*. *Advances in Methods and Practices in Psychological Science*. doi:10.1177/2515245918815849 Preprint: 10.31234/osf.io/87wjc

Chouinard, B., Scott, K., and Cusack, R. (2019). *Using automatic face analysis to score infant behaviour from video collected online*. *Infant Behavior and Development* 54: 1-12. doi:10.1016/j.infbeh.2018.11.004

Scott, K. M. (2019). *Split-brain babies? Differences in representation of bilaterally and unilaterally presented visual concepts in infancy*. *Frontiers in Psychology* 9(2018): 2758. doi:10.3389/fpsyg.2018.02758

Scott, K. M. and Schulz, L. E. (2017). *Lookit (part 1): a new online platform for developmental research*. *Open Mind* 1(1):4-14. doi:10.1162/opmi_a_00002

Scott, K. M., Chu, J., and Schulz, L. E. (2017). *Lookit (part 2): Assessing the viability of online developmental research, results from three case studies*. *Open Mind* 1(1):15-29. doi:10.1162/opmi_a_00001

Scott, K. M., Du, J., Lester, H. A., and Masmanidis, S. C. (2012). *Variability of extracellular action potential measurements with silicon neural probes*. *J Neurosci Meth* 211(1): 22-30. doi:10.1016/j.jneumeth.2012.08.005

Moss, F. J., Imoukhuede, P. I., Scott, K., Hu, J., Jankowsky, J. L., Quick, M. W., and Lester, H. A. (2009). *GABA transporter function, oligomerization state, and anchoring: correlates with subcellularly resolved FRET*. *J Gen Physiol* 134(6):489-521. doi:10.1085/jgp.200910314

CONFERENCE
PRESENTATIONS

Bochynska, A., Scott, K., and Dillon, M. (2021, April). *Bringing home Baby Euclid: Evaluating infants basic shape discrimination using the online platform Lookit*. In symposium: Infants learning about object properties and categories in diverse environments. Presentation at the Virtual Biennial Meeting of the Society for Research in Child Development.

Casey, K., Scott, K., Ashton, K., Gill, J., Simpson, E., and Bayet, L. (2021, April). *Neonatal imitation of caregivers at home: Pre-registered analyses*. Poster at the Virtual Biennial Meeting of the Society for Research in Child Development.

Cassamajor, K., Chu, J., Scott, K., and Schulz, L. (2021, April). *A large-scale study of infant intuitive physics*. Poster at the Virtual Biennial Meeting of the Society for Research in Child Development.

Scott, K.M. (2019, October). *Online developmental data collection*. In preconference workshop: Open developmental science. Presentation at the biennial meeting of the Cognitive Development Society, Louisville, KY.

Scott, K.M. & Schulz, L.E. (2015, March). *Moving the lab home: validation of a web-based system for developmental studies*. In symposium: Big data, little kids: Findings from novel large datasets in developmental psychology. Presentation at the biennial meeting of the Society for Research in Child Development, Philadelphia, PA.

Scott, K.M. & Schulz, L.E. (2014, July). *Interhemispheric integration of visual concepts in infancy*. Paper presented at the annual meeting of the Cognitive Science Society, Quebec City, Canada. <https://mindmodeling.org/cogsci2014/papers/245/paper245.pdf>

Scott, K.M., Spelke, E., and Schulz, L.E. (2014, April). *Interhemispheric Integration in Infancy: Split-Brain Babies?* Presentation at Towards a Science of Consciousness, Tuscon, AZ.

TEACHING
EXPERIENCE

Massachusetts Institute of Technology, Cambridge, MA

Students supervised

Kamaria Kaalund, Wellesley (Fall 2019)	Scout Brisson, MIT (Fall 2014)
Rianna Shah, MIT (IAP, Spring, Fall 2015; IAP, Spring 2016; Spring 2018)	Jasmine Gums, Wellesley (Fall 2014)
Alice Wang, Wellesley (Summer 2017)	Tracy Sorto, MIT (Spring 2014)
Jessica Zhu, MIT (Fall 2016)	Shirin Shivaiei, MIT (IAP, Spring 2014)
Audrey Ricks, MIT (Summer 2016)	Katy Hanling, MIT (IAP, Spring, Summer, Fall 2014; Spring, Fall 2015; IAP, Spring 2016)
Joseph Alvarez, Skidmore (Summer 2015)	Vivienne Wang, Wellesley College (Spring, Summer, Fall 2013)
Junyi Chu, Vanderbilt (Summer 2015)	(Nia) Da Sul Jin, MIT (Fall 2013)
Daniela Carrasco, MIT (Spring 2015)	Chloe Joray, high school student at MIT's Research Science Institute (Summer 2013)
Hope Fuller-Becker, Wellesley (Spring 2015, Spring 2016)	Alice Lu, MIT (IAP 2013, Spring 2013)
Rianna Shah, MIT (IAP, Spring, Fall 2015; IAP, Spring 2016)	Jessica Wass, MIT (Fall 2012, Spring 2013)
Annie (DingRan) Dai, MIT (IAP, Spring 2015)	Susie Lee, Wheaton College (Summer 2012)
Jean Yu, Wellesley (IAP, Spring 2015)	Cindy Zhao, high school student at MIT's Research Science Institute (Summer 2012)
Jean Chow, MIT (Fall 2014)	

Teaching assistant 9.46: Neuroscience of Morality **Fall 2014**
Office hours and individual help with writing; taught classes on moral development and self-control.

Instructor 9.S93: Try this at home! **January 2014**
Created and taught a project-based class in which students created videos about research in cognitive development that demonstrated “at home labs” for parents to try with their kids.

Instructor 9.S93: Baby webcam **January 2013**
Created and taught a project-based class on a new system for running developmental experiments online. Each student adapted an existing experiment for replication using an online system for data collection in development.

Teaching assistant 9.85: Infant Cognition **Fall 2012, Fall 2013**
Grading, office hours; lectures on language acquisition.

California Institute of Technology, Pasadena, CA

Lead instructor LEAD program **Summer 2011**
Worked with four instructors to design and teach neuroscience curriculum for summer program for talented underrepresented high school students.

Teaching assistant YESS program **Summer 2010**
Graded daily homework, helped with electrophysiology experiments, and led an independent project in machine learning for a neuroscience class as part of a summer science program for talented underrepresented high school students.

Teaching assistant Introduction to Computer Science **Fall 2007, 2008, 2009**
Held lab hours and graded problem sets for Caltech’s introductory computer science course, emphasizing formal program evaluation. (Taught in LISP variant Scheme in 2007, Python in 2008 and 2009)

ACADEMIC SERVICE Review of all studies posted on the Lookit platform prior to approval.

Ad-hoc reviewer for Behavior Research Methods, Cognitive Science Society, Collabra: Psychology, Infant Behavior and Development.