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Current Position

Assistant Faculty, Rutgers University – Newark (2013 –)

Education

B.S. *magna cum laude* in Cognitive Psychology, Northeastern University (2002)

Ph.D. Brain and Cognitive Sciences. Massachusetts Institute of Technology (2009)

Post-Doctoral Associate, University of California, Berkeley (2009-2013)

Fellowships, Grants, and Honors***Fellowships, Grants***

Rutgers University – Newark SEED grant, August 2015 – July 2016, \$20,000 (PI of \$12,480)
Co-PIs: William Graves, Jennifer Austin (Ling.), Patrick Shafto (Math & Comp. Sci.)

National Science Foundation, July 2010 – June 2013, \$323,030.
(PI's Alison Gopnik & Tom Griffiths)

Elizabeth Munsterberg Koppitz Child Psychology Graduate Fellowships (2008-2009)
Dissertation Fellowship from the American Psychological Foundation

National Science Foundation Research Fellowship: Honorable Mention (2005, 2004)

Faculty Undergraduate Research Institute Fellowship, Northeastern University (2002)

Provost Research Grant, Northeastern University (2001)

Submitted (in review) funding:

National Science Foundation (MAKER, EAGER): 7/1/16 – 6/30/18 (\$297,772)
Co-PIs: Vanessa LoBue & Patrick Shafto

National Science Foundation (DLS): 7/1/16 – 6/30/19 (\$645,168)

Rutgers University – Newark SEED grant, 7/1/16 – 6/30/18 (\$199,000)
Co-PIs: Vanessa LoBue & Patrick Shafto

National Science Foundation Science of Learning Collaborative (\$749,015)
Co-PIs: Kathy Hirsh-Pasek, Roberta Golinkoff, Fei Xu, Kathleen Corriveau, Patrick Shafto.

Honors

- ICDL-EpiRob 2012 for Best Paper: Experiment Combined with Computational Model (2012)
 First author: “Sticking to the evidence? A computational and behavioral case study of micro-theory change in the domain of magnetism”
- Walle Nauta Award for Continuing Dedication to Teaching (2007)
 MIT Department of Brain and Cognitive Sciences
- Marr Prize for Best Student Paper, Cognitive Science Society (2006)
 “Modeling Cross-Domain Causal Learning in Preschoolers as Bayesian Inference”
- Angus MacDonald Award for Excellence in Undergraduate Teaching (2006)
 MIT Department of Brain and Cognitive Sciences
- Marr Prize for Best Student Paper Honorable Mention, Cognitive Science Society (2005)
 Second author, “Using Physical Theories to Infer Hidden Causal Structure”
- Sullivan Scholarship: Multidisciplinary Research Award (2002) Northeastern University
- Faculty Scholar Senior Award (2002) Northeastern University
- National Society of Collegiate Scholars
 University of Delaware Scholarship Winner (1999)
 Chapter Founder at Northeastern University (2000)
 Chapter President at Northeastern University (2001)

Travel Awards

- Rutgers University, Faculty of Arts and Sciences Travel Award to attend the Cognitive Science Conference, Quebec Canada (2014)
- Cambridge University Machine Learning Summer School Grant (2009)
- Cognitive Science Society Student Travel Award (2007, 2009)
- Association for the Advancement of Artificial Intelligence Student Travel Award (2007)

Publications

Journal Articles

- Walker, C., Bonawitz, E., & Lombrozo, T. (*in review*) Effects of explaining on children’s preference for simplicity.
- Bonawitz, E.B. & Griffiths, T.L. (*in review*) Considering psychological mechanisms can change the interpretation of Bayesian models.
- Bonawitz, E.B. & Shafto, P. (2016) Computational models of learning during development, social influences. *Current Opinions in Behavioral Science*, 7, 95-100.
- Gopnik, A., & Bonawitz, E., (2015) Bayesian models of developmental theory change. *Wiley Interdisciplinary Review: Cognitive Science Vol. 6*(2), p.75-86. DOI: 10.1002/wcs.1330

- Rhodes, M., Bonawitz, E., Shafto, P., Chen^a, A., & Caglar^a, L. (2015) Controlling the message: Preschoolers' use of information to teach and deceive others. *Frontiers in Psychology*, 6, 867.
- Bonawitz, E., Denison, S., Griffiths, T., & Gopnik, A. (2014) Probabilistic Models, Learning Algorithms, Response Variability: Sampling in Cognitive Development. *Trends in Cognitive Science*, 18, 497-500.
- Bonawitz, E., Denison, S., Gopnik, G., & Griffiths, T.L. (2014) Win-stay, lose-shift: A simple sampling algorithm for approximating Bayesian inference. *Cognitive Psychology*, 74, 35-65.
- Denison, S., Bonawitz, E., Gopnik, A., & Griffiths, T. (2012) Rational variability in children's causal inferences: The Sampling Hypothesis. *Cognition*, 126, 285-300.
- Muentener, P., Bonawitz, E.B., Horowitz^a, A., & Schulz, L.E. (2012) Mind the gap: Investigating toddlers' sensitivity to contact relations in predictive events. *PLoS ONE* 7(4): e34061. doi:10.1371/journal.pone.0034061.
- Bonawitz, E.B., van Schijndel, T., Friel^a, D., & Schulz, L. (2012) Children balance theories and evidence in exploration, explanation, and learning. *Cognitive Psychology*, 64(4), 215-234.
- Bonawitz, E.B., & Lombrozo, T. (2012) Occam's Rattle: Children's use of simplicity and probability to constrain inference. *Developmental Psychology*, 48, 1156-1164.
- Bonawitz, E.B., Fischer^a, A., & Schulz, L. (2012) Teaching 3.5-Year-Olds to Revise Their Beliefs Given Ambiguous Evidence. *Journal of Cognition and Development*, 13(2), 266-280. 10.1080/15248372.2011.577701
- Bonawitz*, E.B., Shafto*, P., Gweon, H., Goodman, N.D., Spelke, E., & Schulz, L.E. (2011) The double-edged sword of pedagogy: Teaching limits children's spontaneous exploration and discovery. *Cognition*, 120(3), 322-330. (*joint first author)
- Bonawitz, E.B., Ferranti^a, D., Saxe, R., Gopnik, A., Meltzoff, A., Woodward, J., & Schulz, L. (2010) Just do it? Toddlers ability to integrate prediction and action. *Cognition*, 115, 104-117.
- Schulz, L., Bonawitz, E.B., & Standing^a, H. (2008) Word, thought, and deed: The role of object labels in children's inductive inferences and exploratory play. *Developmental Psychology*, 44(5), 1266-1276.
- Shafto, P., Kemp, C., Bonawitz, E.B., Coley, J.D., & Tenenbaum, J.B. (2008) Reasoning About Causal Transmission. *Cognition*, 109(2), 175-192.
- Schulz, L., Bonawitz, E.B., & Griffiths, T.L. (2007) Can being scared give you a tummy ache? Naive theories, ambiguous evidence and preschoolers' causal inferences. *Developmental Psychology*, Sep Vol 43(5), 1124-1139.
- Schulz, L., & Bonawitz, E.B. (2007) Serious fun: Preschoolers play more when evidence is confounded. *Developmental Psychology*, Jul Vol 43(4), 1045-1050.

Refereed Paper Conference Proceedings

Yu^a, Y., Bonawitz, E., & Shafto, P. (2016) Questions in informal teaching: A study of mother-child conversations. *Proceedings of the 28th Annual Conference of the Cognitive Science Society*. Philadelphia, PA: Cognitive Science Society.

Durkin, K., Caglar^a, L., Bonawitz, E., & Shafto, P. (2015). Explaining Choice Behavior: The Intentional Selection Assumption. In Dale, R., Jennings, C., Maglio, P., Matlock, T., Noelle, D., Warlaumont, A., Yoshimi, J. (Eds.) *Proceedings of the 37th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.

Rhodes, M., Bonawitz, E., Shafto, P., & Chen^a, A. (2014) Controlling the message: Preschoolers' use of evidence to teach and deceive others. *Proceedings of the Thirty-sixth Cognitive Science Society*.

Bonawitz, E.B., Ullman, T., Gopnik, A., & Tenenbaum, J.B. (2012) Sticking to the evidence? A computational and behavioral case study of micro-theory change in the domain of magnetism. *CDL-EpiRob 2012 Proceedings*.

Pham^a, K., Bonawitz, E., & Gopnik, A. (2012). Seeing who sees: Contrastive access helps children reason about other minds. *Proc.s of the Thirty-fourth Cognitive Science Society*.

Gonzalez^a, A. Shafto, P., Bonawitz, E., & Gopnik, A. (2012) Is that your final answer? The effects of neutral queries on children's choices. *Proceedings of the Thirty-fourth Cognitive Science Society*.

Bonawitz, E., Denison, S., Chen^a, A., Gopnik, G., & Griffiths, T.L. (2011) A simple sequential algorithm for approximating Bayesian inference. *Proceedings of the Thirty-third Cognitive Science Society*.

Muentener, P., Bonawitz, E.B., Horowitz^a, A., & Schulz, L.E. (2011) Mind the Gap: Dispositional Agency Facilitates Toddlers' Causal Representations. *Proceedings of the Thirty-third Cognitive Science Society*.

Bonawitz, E.B., & Griffiths, T. (2010) Deconfounding Hypothesis Generation and Evaluation in Bayesian Models. *Proceedings of the Thirty-second Cognitive Science Society*.

Denison, S., Bonawitz, E.B., Gopnik, A., & Griffiths, T. (2010) Preschoolers sample from probability distributions. *Proceedings of the Thirty-second Cognitive Science Society*.

Bonawitz, E.B., Horowitz^a, A., Ferranti, D., Schulz, L. (2009) The Block Makes It Go: Causal Language Helps Toddlers Integrate Prediction, Action, and Expectations about Contact Relations. *Proceedings of the Thirty-first Cognitive Science Society*.

Bonawitz, E.B*., Shafto, P*., Gweon, H., Chang^a, I., Katz^a, S., & Schulz, L. (2009) The Double-Edged Sword of Pedagogy: Modeling the Effect of Pedagogical Contexts on Preschoolers Exploratory Play. *Proceedings of the Thirty-first Cognitive Science Society*.
*Equal author contribution.

Bonawitz, E.B. & Schulz, L.E. (2008) Why Learning is Hard. *Symposium on Naturally-Inspired Artificial Intelligence, Proceedings of AAAI*.

Bonawitz, E.B., Chang^a, I., Clark^a, C., & Lombrozo, T. (2008) Ockham's razor as inductive bias in preschoolers causal explanations. *Proceedings of the 7th International Conference of Development and Learning*.

Bonawitz, E.B., Fischer^a, A., Schulz, L.E. (2008) Training a Bayesian: Three-and-a-half-year-olds' reasoning about Ambiguous Evidence. *Proceedings of the Thirtieth Annual Conference of the Cognitive Science Society*.

Bonawitz, E.B., Lim^a, S., & Schulz, L.E. (2007) Weighing the Evidence: Children's theories of Balance affect play. *Proceedings of the Twenty-Ninth Annual Conference of the Cognitive Science Society*. Nashville, Tennessee.

Bonawitz, E.B., & Schulz, L. (2007) Children's Rational Exploration. *AAAI Fall Symposium on Computational Approaches to Representation Change During Learning and Development*.

Bonawitz, E.B., Griffiths, T.L., & Schulz, L. (2006) Modeling Cross-Domain Causal Learning in Preschoolers as Bayesian Inference. *Proceedings of the Twenty-Eighth Annual Conference of the Cognitive Science Society*. **Marr Prize for Best Student Paper**

Goodman, N.D., Baker, C.L, Bonawitz, E.B., Mansinghka, V.K., Gopnik, A., Wellman, H., Schulz, L.E., & Tenenbaum, J.B. (2006) Intuitive Theories of Mind: A Rational Approach to False Belief. *Proceedings of the Twenty-Eighth Annual Conference of the Cognitive Science Society*.

Shafto, P., Kemp, C., Baraff, E.R., Tenenbaum, J.B., and Coley, J. (2005) Inductive Generalizations of Novel Disease: Causal Generalizations over Foodweb Relations. *Proceedings of the Twenty-Seventh Annual Conference of the Cognitive Science Society*.

Griffiths, T.L., Baraff, E., & Tenenbaum, J.B. (2004) Using Physical Theories to Infer Hidden Causal Structure. *Proceedings of the Twenty-Sixth Annual Conference of the Cognitive Science Society*. **Marr Prize for Best Student Paper Honorable Mention**

Chapters and Theses

Muentner, P., & Bonawitz, E. (*in press*) The development of Causal Reasoning. In Waldman, M. (Ed.) *Oxford Handbook of Causality*. Oxford, United Kingdom: Elsevier Limited.

Shafto, P., & Bonawitz, E. (2015) Choice from among intentionally selected options. In Brian Ross (Ed). *Psychology of Learning and Motivation, Vol 63*, San Diego: Elsevier.

Bonawitz, E. Gopnik, A., Denison, S., & Griffiths, T. (2012) Rational Randomness: The role of sampling in an algorithmic account of preschooler's causal learning. In Xu, F., & Kushnir, T. (Eds.) *Rational Constructivism in Cognitive Development*. Oxford, United Kingdom: Elsevier Limited.

Bonawitz, E.B. (2009) *The Rational Child: Theories and Evidence in Prediction, Exploration, and Explanation*. MIT PhD Thesis in Brain and Cognitive Sciences.

Coley, J.D., Shafto, P., Stepanova, O., & Baraff, E. (2005) Knowledge and Category-Based Induction. In Ahn, W., Goldstone, R. L., Love, B. C., Markman, A. B., & Wolff, P. (Eds.) *Categorization inside and outside the laboratory: Essays in honor of Douglas L. Medin*. Washington, DC: American Psychological Association.

Baraff, E. (2002). *The Effects of Time Constraints on Expert and Novice Reasoning about Music*. Northeastern University Honors Thesis.

In Revision & Preparation

Bonawitz, E.B., Shafto, P., Bridgers^a, S., Gonzalez^a, A., & Gopnik, A. (*in revision*) Children rationally change their beliefs in response to neutral follow-up questions.

Bonawitz, E.B. (*in revision*). Children's reasoning under uncertainty. *Child Development Perspectives*.

Bonawitz, E.B., Ullman, T., Gopnik, A., & Tenenbaum, J.B. (*in revision*) Chicken-and-egg: A computational, historical, and behavioral case study of micro-theory change in the domain of magnetism.

Lombrozo, T., Bonawitz, E., Brooke^a, N.R. (*in revision*) Asymmetries in young children's learning of teleological and mechanistic explanations.

Shafto*, P., Bonawitz*, E., Landrum, A., & Yu, Y. (*in prep*) Questioning supports effective transmission of knowledge and increased exploratory learning in pre-kindergarden children. (*joint first authors)

Bonawitz, E., Walker, C., Abbot, J., Griffiths, T., & Gopnik, A. (*in prep*) Variability in preschoolers' cognitive search.

Durkin, K., Bonawitz, E., & Shafto, P. (*in prep*) Individual choice behavior: Theoretical analysis in cooperative context.

Bonawitz, E.B., Goodman, N.D., Pham^a, K., Baker, C.L, Gopnik, A., Wellman, H., Schulz, L.E., Saxe, R., & Tenenbaum, J.B. (*in prep*) Ideal Observers in Theory of Mind.

Bonawitz, E., Hanson^a, M., Ramarajan^a, D., Shafto, P., Wellman, H., Gopnik, A. (*in prep*) Pedagogy and Theory of Mind: The relationship between children's teaching and their reasoning about others.

Selected¹ Talks and Presentations

Invited Talks

Bonawitz, E.B., (2016) *Development of Causal Reasoning*. Talk as part of the invited symposium, Causal reasoning: Origins and Development. *Cognitive Science Society 38th Annual Meeting*. Philadelphia, PA

Lapidow^a, E., & Bonawitz, E.B. (2016) *Cognitive heuristics for computing information gain in children and adults*. Talk as part of a refereed Cognitive Science Society Conference Workshop: *Active learning: Cognitive development, education, and computational models*. Philadelphia, PA.

^a Students under my direct supervision are mark with a superscript. It is my policy to offer first authorship to students as default.

¹Only first author presentation roles listed; refereed proceedings and poster presentations are not included.

Bonawitz, E.B., (2016) Beyond the data: how social inferences shape preschooler's explanatory reasoning. Talk as part of the invited symposium, Biological and cognitive constraints on the development of explanatory reasoning. *Budapest Conference on Cognitive Development*. Budapest, Hungary.

Bonawitz, E.B., (2016) Discussant as part of the refereed symposium, "Are children effective active learners?" *Budapest Conference on Cognitive Development*. Budapest, Hungary.

Bonawitz, E.B. (2015) Children's reasoning about probability to guide exploration-exploitation trade-offs. Discussant at the "More on Development" Conference, Columbus, OH.

Bonawitz, E.B. (2015) Children's reasoning about evidence: social inferences and sampling. University of Maryland, Department of Human Development.

Bonawitz, E.B. (2014) Children's reasoning about evidence: social inferences and sampling. Yale University Psychology Department.

Bonawitz, E.B. (2014) Social inferences and sampling. Drexel University Psychology Department.

Bonawitz, E.B. (2014) Children's reasoning about evidence. University of Pennsylvania Psychology Department.

Bonawitz, E.B. (2013) Bayesian Models of Cognitive Development. *Budapest Conference on Cognitive Development*. Budapest, Hungary.

Bonawitz, E.B., (2012) How children change their minds. *University of California, Merced Psychology Department Colloquium*.

Bonawitz, E.B. (2012) Exploring the Sampling Hypothesis in Preschooler's causal inferences. *Bay area cognitive science conference*.

Bonawitz, E.B. (2012) What kids know about causality: Limitations of predictive relations. Dispositional agency and causal language facilitate toddlers' causal representations. *Berkeley Cognitive Science Society Causality Seminar Series*.

Bonawitz, E.B. (2012) The child as a scientist: How children change their minds. Menlo-Atherton Coop Nursery School speaker series.

Bonawitz, E.B. (2010) When preschooler's are taught, and when they teach others. *Workshop on Social Cognition and Statistical and Causal Learning*. Stanford, CA.

Bonawitz, E.B. (2010) Algorithms of Children's Causal Learning: Sampling. *McDonnell Consortium Workshop*

Bonawitz, E.B., (2009) The Rational Child: Theories and Evidence in Prediction, Explanation, and Exploration. Change, Plasticity and Development Colloquium. Berkeley, CA.

Bonawitz, E.B. (2009) "The block makes it go!": Toddlers' ability to integrate prediction, action, and expectations about contact relations. *Probabilistic Models of Cognitive Development*. Banff International Research Station.

Bonawitz, E.B. (2009) Rational Explanation: Modeling the Role of Beliefs and Evidence. Mechanism & Explanation Workshop. Berkeley, CA.

Bonawitz, E.B. (2009) Beyond Bachelors: Pursuing Psychology in graduate school and beyond. Northeastern University Psychology Department Graduation.

Bonawitz, E.B., (2008) Children's Causal theories affect exploration, explanation, and visual attention. *McDonnell Workshop on Problems of Variable Definition*. Carnegie Mellon University.

Bonawitz, E.B. (2008) The Rational Child: Reasons behind kids quirky behaviors. Lecturer at Museum of Science Life Cycle Adult Workshop, special session on The science of kids, February, 2007. Boston, MA.

Bonawitz, E.B. (2006) Bunnies, Boxes, and Balances: The role of theories, evidence, and free play in children's causal learning. *Brown Conference on Causal Reasoning*. Providence, RI.

Bonawitz, E.B. (2006) Science of Cognitive Development; *Boston Museum of Science Innovators Day Discovery Center Exhibit*

Bonawitz, E.B. (2005) Evidence, Theories, and Spontaneous Play in Preschoolers: How Little Scientists Become Smart Scientists. Northeastern University.

Refereed Conference Presentations

Lapidow^a E., & Bonawitz, E. (2016) Preschoolers evaluate risk and reward in exploration-exploitation tasks. *Proceedings of the 28th Annual Conference of the Cognitive Science Society*. Philadelphia, PA: Cognitive Science Society.

Walker, C., Bonawitz, E., & Lombrozo, T. (2016) Explaining promotes a preference for simplicity in young children. *Society for Philosophy and Psychology*.

Lapidow^a, E. & Bonawitz, E. (2016) Heuristics in exploration: Distributional information is selectively used for active learning. *Cognitive Science Society*.

Lapidow^a, E., & Bonawitz, E. (2015) Preschooler's reasoning about probability to guide exploration-exploitation. *Cognitive Development Society*

Castro^a, A., & Bonawitz, E. (2015) Puzzling Question of Curiosity: Information about the difficulty of one task influences preschoolers' exploratory play with a novel toy. *Cognitive Development Society*

Blacker^a, K., Bonawitz, E., & LoBue, V. (2015) Why is she sick? Prompting preschoolers to provide explanations during storybook reading increases causal learning about illness. *Cognitive Development Society*

Castro^a, A. & Bonawitz, E. (2015) A puzzle for your thoughts: Information about the difficulty of one task influences preschoolers' exploratory play with a novel toy. *37th Meeting of the Cognitive Science Society*. Pasadena CA.

Bonawitz, E. (2015) Variability in Preschoolers' Cognitive Search. Symposium, Knowledge From Nowhere: How Thinking Leads to Learning in Childhood. Society for Research in Child Development. Philadelphia, PA.

Bonawitz, E., (2015) Algorithms of statistical learning: The win-stay, lose-sample strategy and preschooler's causal inferences. Symposium, Understanding the mix: Clear cases and noisy data in word-referent learning. Society for Research in Child Development. Philadelphia, PA.

Bonawitz, E., Ullman, T., Bridgers^a, S., Gopnik, A., & Tenenbaum, J. (2014) A computational case study of theory change in the domain of magnetism. Symposium on "Theory Change". *Eastern Psychological Association*.

Bonawitz, E., Ullman, T., Bridgers^a, S., Gopnik, A., & Tenenbaum, J. (2013) Sticking to the evidence? A behavioral and computational case study of micro-theory change in the domain of magnetism. *Cognitive Development Society*.

Bonawitz, E., Hanson^a, M., & Gopnik, A., (2013) "Show and Tell": Preschoolers' sensitivity to others' knowledge when selecting evidence in service of teaching. *Society for Research in Child Development*.

Bonawitz, E.B., Denison, S., Gopnik, A., & Griffiths, T. (2011) Exploring the "Sampling Hypothesis" in preschooler s causal inferences. *Cognitive Development Society*.

Bonawitz, E.B., Ramarajan^a, D., Wellman, H., Griffiths, T., & Gopnik, A. (2011) The ability to teach others is linked to Theory of Mind. *Society for Research in Child Development*

Bonawitz, E.B., Ullman, T., & Tenenbaum, J. (2011) Sticking to the evidence? A case study of preschoolers' micro-theory change in the domain of magnetism. *Society for Research in Child Development*

Bonawitz, E.B., & Griffiths, T. (2010) Deconfounding Hypothesis Generation and Evaluation in Bayesian Models. *Cognitive Science Society*.

Bonawitz, E.B., (2009) The Importance of Priming Sampling: Distinguishing hypothesis generation from hypothesis evaluation. NIPS Workshop "Bounded-rational analysis of human cognition".

Bonawitz E.B., Brenman^a, S., & Schulz, L. (2009) Believing is Seeing: Children's Causal Beliefs Affect Visual Exploration and Prediction. Thirty-first Cognitive Society Conference

Bonawitz, E.B., & Schulz, L. (2009) Language Influences Toddlers' Causal Reasoning: From Correlation to Intervention. *Society for Research in Child Development*. Symposium: Linguistic Contexts of Causal Cognition: How Children use Language to Learn, Represent and Reason About Cause

Bonawitz, E.B., & Schulz, L. (2009) Balancing Theories and Evidence in Children's Exploration, Explanations, and Learning. *Society for Research in Child Development*.

Bonawitz, E.B. (2007) Can Being Scared Cause Tummy Aches? Naive Theories, Ambiguous Evidence and Preschoolers Causal Inferences. *Society for Research in Child Development*.

Bonawitz, E.B., & Lombrozo, T. (2007) Simplicity and Probability in Children's Causal Explanations. *Cognitive Science Society*.

Standing^a, H., Bonawitz*, E.B., & Schulz, L. (2007) The Role of Word Labels in Children's Causal Inductions and Exploratory Play. *Cognitive Science Society*. *Presenting Role

Bonawitz, E.B., Griffiths, T.L., & Schulz, L. (2005) Theories, Evidence, and Preschoolers Causal Judgments. *Cognitive Development Society*, San Diego, CA.

Baraff, E.R., Cheries, E., and Carey, S. (2005) The Role of Spatiotemporal Relations in Infants Encoding of Individuals. *Society for Research in Child Development*. Atlanta, GA.

Baraff, E. & Tenenbaum, J.B. (2004). The Role of Theory of Mind Inferences in Bayesian Word Learning. *First Joint Conference of the Society for Philosophy & Psychology and The European Society for Philosophy & Psychology*. Barcelona, Spain.

Baraff, E., & Coley, J.D. (2003) Thinking About Music: Novice and Expert Inductive Reasoning. *25th Annual Conference of the Cognitive Science Society*. Boston, MA.

Baraff, L. & Coley, J.D. (2002). Expert and Novice Inductive Reasoning in Fast and Slow Conditions. *Northeastern University College of Arts & Sciences Experiential Education Expo*, May 2002.

Baraff, L., & Jacobson, J. (2002). Revisiting Jewish Musicality in America. *Northeastern University College of Arts & Science Experiential Education Expo*, May 2002.

Teaching Experience

Lecturer

Psychology Special Topics, Writing Intensive, “Human Intelligence Enterprise” (Rutgers, SP2016)

Cognitive Processes, Graduate level (Rutgers, FA2015)

Cognitive Processes, “Introduction to Cognitive Science” (Rutgers, SP2015)

Seminar organizer

Cognitive Processes Seminar (“CBB”) (Rutgers, SP2015; FA2015; SP 2016)

Bits & Bytes: Machine Learning Seminar (Rutgers, FA-SP, 2015-2016)

Lab PI

Research In Psychology (Rutgers, SP14; FA14; SP15; FA15; SP16)

Senior Thesis (Rutgers, FA14; SP15; FA15; SP16)

Teaching Assistant

Infant and Childhood Cognition (MIT, F2005); *Angus MacDonald Award for Excellence in Undergraduate Teaching*

Infant and Childhood Cognition (MIT, F2006); *Walle Nauta Award for Continuing Dedication to Teaching*

Brain and Cognitive Sciences II for Graduate Students (MIT, S2008)

Invited Guest Lecturer

Cognitive Development (MIT, F2007; F2008)

Introduction to Child Psychology (MIT Freshman Pre-orientation Program; F2008)

Topical Seminar in Developmental Psychology (Berkeley, F2009)

Basic Issues in Cognition (Berkeley, F2009)

BROCA, Berkeley Review of Cognitive Science Articles (Berkeley, F2010)

Cognition, Emotion, and Personality. Doctoral course in clinical psychology at the Wright Institute. (S2012)

Life Cycle Adult Workshop: Science of Kids (February, 2008) *The Rational Child: Reasons behind Kids' Quirky Behaviors*, Museum of Science, Boston MA

Science Staff Training: Early Childhood Cognition Lab & Discovery Center Collaborative Debriefing (05/06; 12/06; 05/07, 11/07, 05/18, 12/08, 04/09)

Trainees Mentored

Post-doctoral fellows (1): Yue Yu; Co-mentored with Patrick Shafto (Summer 2015-present)

Graduate students (3): Katy-Ann Blacker; Co-mentored with Vanessa Lobue & Gretchen Van de Walle. Rutgers Psychology PhD Program (Spring 2014 – Spring 2016); Ilona Bass (Fall 2016 - current); Carla Macias (Fall 2016 – current)

Dissertation committee (4): Jessica Benson, Catherine Cho, Shahram Peyvandi, Brynne Dimenichi (2015-present)

MBRS Students (2): Amanda Castro (2014-2015), Joseph Colantonio (2015-2016)

Lab Technicians mentored at Rutgers (4): Elizabeth Lapidow (Spring 2015 – present); Leyla Caglar, (Fall 2013 – Fall 2015); Samantha Kinsley (2014-2015); Sophie Bridgers, Rutgers University & University of California – Berkeley (2012 – 2014)

Lab Technicians mentored at University of California - Berkeley (4): Kathy Pham (2012-2013); Annie Chen (2011-2012); Mason Hanson (2012-2013); Aaron Gonzalez (2012-2013)

Undergraduate Research Assistants at Rutgers University (2014-present; ***Honors Thesis: 5**):

Raquel Damaghi*	Janet Sayilik	Kristina Roose*
Samantha Kinsley	Tahani Chaudhri	Samantha Smith
Amanda Castro*	Richard Ortegon	Itzel Santana-Miranda
Sadie Logozio	Christopher Sakariasen	Jack Fredricks
Renu Mahagaonkar	Patricia Palanca	Joseph Colantonio*
Trisha Dehrone	Adam Yen*	Victoria Golinski
Hira Abbacy	Iqra Azam	Sara Tariq
Reham Bader	Natasha Patel	Ethan Motschmann

High school Outreach mentees (2015-2016; Northstar): Viannis Almonte, Mariyam Kayjay

Professional Activities & Service

Campus-Based

Participation in Northstar Mentorship Program (2015-2016)

Masters Program Committee Chair (MPC), (Fall 2015- present)

Master of Science in Data Science Program Committee, (Fall 2015 – present)

Committee member for formation of the Center for Data Science, Learning, and Applications (C-DSL), (Spring 2014 – Spring 2015)

Henry Rutgers Term Chair proposal working group & **search committee co-chair** (Spring 2014 – Spring 2015). Offer was made to and accepted by Dr. Patrick Shafto.

MA development committee (SP2015)

Rutgers Psychology Website Committee, (Spring 2014 – present)

Distinguished Teaching Award committee (Summer 2014, Spring 2016)

Qualifying Exam Committee (2014)

Additional service: Co-wrote Psychology Department Strategic Initiatives Activities Report (SP2015); Faculty Departmental Commencement Attendance (SP2015); Lab participation in Rutgers Day (SP2014, SP2015, SP2016)

Community outreach & collaboration (2013 – current)

Teacher and parent outreach at 15 area daycares. Includes routine parent newsletters, information sessions at pick-up and drop-off, and meetings with directors and teachers.

Additional outreach sites include: Newark Public Library (5 Washington St, Newark, NJ 07102); KidzVillage Children's Center (131 S 31st St, Kenilworth, NJ 07033); Turtle Back Zoo (560 Northfield Ave, West Orange, NJ 07052)

Grant Advisory Boards

STEM in the PlayScape: Building Knowledge for Educational Practice. PIs: Vicki Carr & Heidi Kloos. NSF (2015-2018)

Adhoc and Conference Reviewing

Cognition, Cognitive Science, Child Development, Cognitive Psychology, Developmental Science, British Journal of Development, Journal of Experimental Psychology: Learning, Memory and Cognition, Quarterly Journal of Experimental Psychology, PLoS ONE

Society for Research in Child Development, Annual Conference of the Cognitive Science Society, Society for Philosophy and Psychology, International Conference of Development and Learning, Granting organizations (NSF, NIH, NWO)

Membership in Scientific and Professional Societies

Cognitive Science Society, Cognitive Development Society, Society for Research in Child Development, Eastern Psychological Association, Society for Philosophy and Psychology

Organizing Conferences, Symposia, & Workshops

Organizer: *Active Learning: Cognitive Development, education, and computational models*. (in review). Submitted to the *Cognitive Science Society Workshop Panel*.

Co-organizer: *More on Development, CDS Post-conference*. Full day post-conference session with 7 mini-symposia, 17 speakers and ~100 attendees following the Cognitive Development Society Annual Conference. Co-organized with Tomer Ullman. October 2015.

Pre-conference Organizer: *Computational Models of Cognitive Development*. Full day pre-conference session with 16 speakers and over 100 attendees at the Cognitive Development Society Annual Conference. Co-organized with Tomer Ullman and Josh Tenenbaum. (10/13).

Symposium Chair: *The Problem of Probabilistic Inference: How Children Learn from and Search through Probabilistic Worlds*. Cognitive Development Society. October, 2011. Philadelphia, PA.

Symposium Chair: *Learning by Doing: The Role of Exploratory Play in Cognitive Development*. Cognitive Development Society. October, 2007. Santa Fe, NM.

Symposium Chair: *What Makes us Sick? Naïve Theories and Biological Reasoning*. March, 2007. Society for Research in Child Development. Boston, MA.

Media Coverage

Television & Film:

National Geographic - *Ape Genius* (Aired NOVA, PBCS, Spring 2008) Research Consultant, Technical Assistant, Child Studies Coordinator

In the news:

Ideas.TED.com – *There's no App for Good Teaching*. (September, 2014)

Huffington Post – *Texting, TV and Tech Trashing Children's Attention Spans*. (Jan. 2014)

Psychology Today – *Does Curiosity Guide Children's Learning? Explaining "explaining away" and the process of revising beliefs*. (April, 2012)

UC Berkeley New Center - *Scientists tap the genius of babies and youngsters to make computers smarter* (March, 2012)

Psychology Today - *Choosing the Best Explanation Is Elementary, My Dear Watson Sherlock Holmes or Occam's Razor? Let the kids decide*. (January, 2012)

The Christian Science Monitor – *Toddlers to tweens: relearning how to play*. (Jan, 2012)

Huffington Post - *Give the Gift of Curiosity for the Holidays -- Lessons From Laura Schulz* (December, 2011)

Scientific American – *The educational value of creative disobedience*. (July, 2011)

MIT news – *Don't show, don't tell?* Featured MIT front page. (June, 2011)

The Economist – *Now you know: When should you teach children, and when should you let them explore?* (May, 2011)

Slate – *Why Preschool Shouldn't Be Like School* (March, 2011)

Boston Globe – *A squeeze, a squeak, a glimpse of learning* (March, 2011)

Discover Magazine – *When teaching restrains discovery* (January, 2011)

Scientific American – *How Babies Think* (July, 2010)

Slate Magazine – *Why do kids crave magic* (October, 2009)

New York Times – *Your Baby Is Smarter Than You Think* (August, 2009)

National Public Radio, KPW Utah (May, 2006)