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Positions

Associate Professor, Faculty, Harvard University (Jan 2021 - present)

Associate Professor. Faculty, Rutgers University – Newark (2019 – Dec 2020)

Assistant Professor. Faculty, Rutgers University – Newark (2013 – 2019)

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 – Active (\$4,850,809)

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|-----------|--|
| 2025-2029 | Templeton World Charity Organization. “A multi-method approach to discovering the origins of reasoning about multiple possibilities: Behavioral, neurological, computational, and environmental measures”
Role: Co-PI (w/ Stephanie Denison, Caren Walker, Katarina Begus)
Total Award: \$1,271,422 |
| 2023-2028 | National Science Foundation. “Cognitive Mechanisms of Guided Instruction in the Early Elementary Years”
Role: PI. (w/ co-Is, Igor Bascandzhev, Patrick Shafto, & Caren Walker)
Total Award: \$1,500,000 |
| 2023-2027 | National Science Foundation. “Developing an early understanding of contagion in preschool- and kindergarten-aged children”
Role: Co-PI. (w/ Vanessa LoBue, Nina Fefferman)
Total Award: \$1,103,927 |
| 2018-2026 | James S. McDonnell Foundation Scholar Award in Understanding Human Cognition. Learning in Early Childhood: A Computational Cognitive Developmental Approach. |

Role: PI

Total Award: \$600,000

2024-2025 Developing Belief Network. “Continued development of the Talk of the Town App, for launching research through the Developing Belief Network”.

Role: PI (w Co-Is Shafto, Kominsky)

Total Award: \$215,460

2022-2027 Jacobs Foundation CRISP Fellowship. Learning Minds: Creating Impact Science Program.

Role: PI.

Total Award: 150,000 Swiss Francs (~\$160,000)

Trainee Fellowships – Terminated by Executive Order to Harvard (\$449,170)

2024-2028 NSF Graduate Fellowship Award. “Understanding the role of explanation on elementary school children’s learning in science domains”

Supporting Michelle Wong

Total Award: \$111,000

2023-2025 NSF Postdoctoral Fellowship Award. “When Teachers Aren't There: Detecting, Evaluating, and Learning from Rote Teaching Across Development”

Supporting Ilona Bass (co advised by Prof. Tomer Ullman, Harvard Psychology)

Total Award: \$338,170

Trainee Fellowships – Advisees on awards supporting lab projects (active only)

2025 Caplan Foundation Award. “Detecting and Learning From Automatic Teaching in Early Childhood”

Supporting Dr. Ilona Bass

Total Award: \$63,000

Grant Collaborations – Co-Investigator on grants with funding to PI only

2022-2025 Independent Research Fund Denmark. “What motivates infant learning”

PI. Katarina Begus

Total Award: 6,173,712 DKK (~\$890,900 USD)

Fellowships, Grants – Completed (\$4,216,098)

2021-2024 National Science Foundation. “Innovating Developmental Science with an Online, Scalable Meta-Science Platform for Investigating Cognitive Development During Early Childhood.

Role: Co-PI. (w/ Mills, Sheskin, Schulz, Gweon, Jara-Ettinger, & Rhodes)

2023 REU Supplement: \$6,000

Total Original Award: \$1,250,000

- 2022-2024 National Science Foundation. “EAGER: Talk of the Town App for Research”
Role: PI (w/ Prof. Patrick Shafto, Rutgers University).
Total Award: \$74,999
- 2023-2024 Mind Brain and Behavior Early Career Investigators Award. “Understanding Question Boosted Learning in Early Childhood: A Behavioral, Neurological, and Computational Investigation”
Role: PI
Total Award: \$50,000
- 2023 William K. and Katherine W. Estes Fund from Association for Psychological Science and the Psychonomic Society. “Computational Cognitive Models of Learning and Development” Summer School Workshop.
Role: PI (w/ Prof. Tomer Ullman and Prof. Kimele Persaud)
Total award: \$15,000
- 2021-2022 Caplan Foundation for Early Childhood. “The Mind Lab: Thought Experiments as a Means to Teaching Science Effectively and Efficiently”
Role: PI (w/ postdoctoral fellow Igor Bascandziev, & Prof. Caren Walker UCSD).
Total Award: \$61,666
- 2019-2021 Jacobs Foundation Fellowship Alumni Boost Project. “Exploring the effects of a curiosity intervention on learning, cognition, motivation, and brain connectivity”.
PN: 2019-1356-01
Role: Co-PI. (w/ Allyson Mackey)
Total Award: \$102,000
- 2017-2021 National Science Foundation. Why Questions? Investigating the social basis of questioning for learning.
Role: PI. (Co-PI: Patrick Shafto)
2020 REU Supplement: \$9,100
2019 REU Supplement: \$8,750
Total Original Award: \$499,984
- 2020 Social Science Research Council SSRC Rapid-Response Grants on Covid-19 and the Social Sciences, “Understanding intuitive judgments of “overreaction”.
Role: Co-PI (w/ postdoctoral fellow Jonathan Kominsky)
Total Award: \$4500
- 2017-2020 Jacobs Foundation Early Career Research Fellowship; Science of Learning.
Role: PI
Total Award: \$165,000
- 2018-2020 National Science Foundation. MRI: Acquisition of a GPU cluster to support interdisciplinary research in human learning, machine learning, and data science.
Role: Co-PI. (PI: Patrick Shafto).
Total Award: \$99,999
- 2016-2019 National Science Foundation. Choosing to learn: Investigating the factors that drive preschooler’s exploration.
Role: PI.

2019 REU Supplement: \$6,160
Total Original Award: \$645,168

- 2016-2019 National Science Foundation. EAGER: MAKER: The origins of making: A Data Science approach to investigating cognitive and affective basis of learning through constructing.
 Role: PI. (Co-PIs: Vanessa LoBue, Patrick Shafto)
Total Award: \$297,772
- 2016-2019 National Science Foundation. Guiding guided learning: Developmental, educational and computational perspectives.
 Role: Co-PI. (PI: Patrick Shafto).
Total Award: \$750,000
- 2016-2018 Rutgers University – Newark, Chancellor’s SEED grant. A Data Science approach to investigating cognitive and affective basis of learning through constructing in the Newark Community.
 Role: PI. (Co-PIs: Vanessa LoBue, Patrick Shafto)
Total Award: \$75,000
- 2016-2018 Rutgers University – Newark, Chancellor's Seed Grant Program. Creation of the Rutgers Cognitive Science Center (RCSC).
 Role: Co-PI. (Multiple Co-PIs)
Total Award: \$50,000
- 2015-2016 Rutgers University – Newark, Chancellor’s Seed Grant. Computational models of language learning, Towards the Creation of the Rutgers Cognitive Science Center.
 Role: PI. (Co-PIs: William Graves, Jennifer Austin, & Patrick Shafto)
Total Award: \$20,000 (PI of \$12,480)
- 2008-2009 Dissertation Fellowship from the American Psychological Foundation. Elizabeth Munsterberg Koppitz Child Psychology Graduate Fellowships.
 Role: PI.
Total Award: \$25,000

Grant Collaborations completed– Co-Investigator with funding to PI only

- 2022-2024 German Research Foundation (DFG). “Is asking students to generate predictions an effective technique to induce meaningful cognitive conflict and to facilitate conceptual change?”
 PI. Garvin Brod
Total Award: 222,000 €

Honors

Board of Trustees Research Fellowship for Scholarly Excellence. Rutgers University. (2019)

Presidential Fellowship for Teaching Excellence. Rutgers University. (2019)

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”

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

Faculty Undergraduate Research Institute Fellowship, Northeastern University (2002)

Sullivan Scholarship: Multidisciplinary Research Award (2002) Northeastern University

Provost Research Grant, Northeastern University (2001)

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

Jacobs Foundation Keynote Symposium Address Travel Award. (2019) To the *41st Annual Meeting of the Cognitive Science Society*, Montreal, Canada.

Society for Philosophy and Psychology Keynote Symposium Address Travel Award. (2019)
To the annual conference of SPP, San Diego, CA.

Cognitive Science Society Travel Award as invited Keynote symposium speaker at the Cognitive Science Society Conference, Philadelphia PA (2016)

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

(^a Trainees; I take a “senior author”, last position role in all papers coming out of my lab)

Journal & Refereed Conference Articles – Submitted (13)

Brod, G., & Bonawitz, E. (*in review, invited revision*) The Case for Rational Constructivist Theories of Learning.

Yang^a, Y., Leotti^a, L., Shafto, P., LoBue, V., & **Bonawitz, E.** (*in review, invited revision*) Parent-Child Interaction Styles Relate to Preschooler's Causal Play, Learning, and Generalization

Lörch, L., **Bonawitz, E.**, & Brod., G. (*in review, invited revision*) The Power of Varying More Than One Thing at a Time.

Koepp, A., Ziv, M., Reye, L.D., **Bonawitz, E.**, & Mackey, A. (*in review, invited revision*) Daily Dynamics of Children's Science Learning: Association with Fluctuations in Attention and Family Stress.

Park*, A.T., Colantonio^{*a}, J., Delagdo Reyes, L., Sharp, S., **Bonawitz****, E., Mackey**, A.P. (*in review, invited revision*). Question asking fosters curiosity and learning in children. *Joint first Authors. **Joint Last Authors

Bonawitz, E., Walker, C., Abbot, J., Lapidow^a, E., Griffiths, T., & Gopnik, A. (*in revision, invited revision*) Variability in preschoolers' cognitive search. *Cognition*.

Leotti^a, L., Callahan, M., Fefferman, N., **Bonawitz, E.**, & LoBue, V. (*in review, invited revision*) The co-development of children's general causal reasoning and their causal reasoning of illness transmission.

Bass, I., **Bonawitz, E.**, & Ullman, T. (*in review*) The Development of Sensitivity to Automatic Behavior in Pedagogy.

Bascandziev^a, I., Abutto^a, A., Walker, C., & **Bonawitz, E.** (*in review*) The Mind Lab: Thought Experiments as a Means to Teaching Science Effectively and Efficiently.

Rule^{a*}, J., Goddu^{a*}, M.K., Chu^a, J., Pinter^a, V., Reagan^a, E.R., **Bonawitz, E.**, Gopnik, A. & Ullman, T. (*in review*) Children's play differs from both exploring and exploiting.

Bonawitz, E. & Griffiths, T.L. (*in review*) Considering psychological mechanisms can change the interpretation of Bayesian models.

Andreuccioli, L., Mazor, S., Begus, K., **Bonawitz, E.**, Denson, S., & Walker, C. (*in review*). From what must be to what may be: Young children adapt their search behavior for necessary versus possible outcomes.

Ziv, Maayan, Ellwood-Lowe, M.E., Botdorf, M., Nishio, M., **Bonawitz, E.**, & Mackey, A.I. (*in review*). Neural responses to state curiosity in young children.

Journal Articles – Published (64)

Chu, J., Goddu, M.K., Rule., J.S., Pinter, V., Reagan, E.R., **Bonawitz, E.**, Gopnik, A., & Ullman, T. (*accepted*). Fun isn't easy: Children choose more difficult options when "playing for fun" vs. "trying to win". *Developmental Psychology*.

Colantonio^a, J., Bass^a, L., Shing, Y.L, Wijekumar, S, McKay, C, Rafetseder, E, Mackey, A., & **Bonawitz, E.** (*in press*) Computational Approaches Reveal Developmental Shifts in Exploratory Play. *Developmental Science*.

- Brod, G., Holstein, E., Weindorf, L., Colantonio^a, J., **Bonawitz, E.**, & Theobald, M. (2025) Do it Yourself: Discerning the Effects of Self-Directed Activity on Concept Learning. *npj Science of Learning*, 10(1), 70. [10.1038/s41539-025-00364-9](https://doi.org/10.1038/s41539-025-00364-9)
- Persaud^a, K., Macias^a, C., & **Bonawitz, E.** (2025) Expectation-[In]congruence Differentially Impacts Recall and Recognition of Object Features. *Memory and Cognition*. 1-24. <https://doi.org/10.3758/s13421-025-01740-x>
- Kominsky^a, J., Knobe, J., & **Bonawitz, E.** (2025). The development of the “first thing that comes to mind”. *Developmental Psychology*. <https://doi.org/10.1037/dev0001994>
- Bass^a, I., Colantonio, J., Aboody^a, R., Wong^a, M., Ullman, T., & **Bonawitz, E.** (2025) Children’s sensitivity to automatic behavior relates to pedagogical reasoning and Theory of Mind. *Frontiers* (3), 1574528. <https://doi.org/10.3389/fdpys.2025.1574528>
- Bascandziev^a, I., Abutto^a, A., Walker, C., & **Bonawitz, E.** (2025) Mind over Matter: Consistency Monitoring and Domain-Specific Learning. *Frontiers*, (3). <https://doi.org/10.3389/fdpys.2025.1496651>
- Bascandziev^a, I., Shafto, P., & **Bonawitz, E.** (2025) Prosodic cues support inferences about the question’s pedagogical intent. *Open Mind*, 9, 340-363. https://doi.org/10.1162/opmi_a_00192
- Wong^{a*}, M., Choi^{a*}, K., Barak, L., Lapidow^a, E., Austin, J., Shafto, P., & **Bonawitz, E.** (2024) Young children’s directed question asking in preschool classrooms. *Behav. Sci.* 14(9), 754. <https://doi.org/10.3390/bs14090754> *Joint first authors
- Begus^a, K., & **Bonawitz, E.** (2024) Infants evaluate informativeness of evidence: Theta oscillations and predictive looking reveal sensitivity to causal confounds. *Nature – Communications Psychology*, 2(1), 77. <https://doi.org/10.1038/s44271-024-00131-3>
- Colantonio^a, J., Theobald, M., Bascandziev^a, I., Brod, I., & **Bonawitz, E.** (2024) Predicting Learning: Generating Predictions May Mitigate Executive Function’s Role in Children’s Belief Revisions of Water Displacement. *TopiCS*. <https://doi.org/10.1111/tops.12749>
- Bass^a, I., & **Bonawitz, E.** (2024). Early environments and exploration in the preschool years. *Plos one*, 19(6), e0305353. <https://doi.org/10.1371/journal.pone.0305353>
- Bass^a, I., Espinoza^a, C., **Bonawitz, E.**, & Ullman, T. (2024) Teaching without thinking: Negative Evaluations of Rote Pedagogy. *Cognitive Science*, 48(6), e13470. <https://doi.org/10.1111/cogs.13470>
- Theobald, M., Colantonio^a, J., Bascandziev, I., **Bonawitz, E.**, Brod, G. (2024) Do Reflection Prompts Promote Children’s Conflict Monitoring and Revision of Misconceptions?” *Child Development*. <https://doi.org/10.1111/cdev.14081>
- Ozernov-Palchik, O., Pollack, C., **Bonawitz, E.**, Christodoulou, J., Gaab, N., Gabrieli, J., Kievlan, P.M., Kirby, C., Lin, G., Luk, G., Nelson, C. (2024) Reflections on the past two decades of Mind, Brain, and Education. *Mind, Brain, & Education*, 18(1), 6–16. <https://doi.org/10.1111/mbe.12407>

Bass^a, I., Mahaffey^a, E., & **Bonawitz**, E. (2023) Children use teachers' beliefs about their abilities to calibrate explore-exploit decisions. *TopiCS Topics in Cognitive Science*. <https://doi.org/10.1111/tops.12714>

Lapidow^a, E., & **Bonawitz**, E (2023) What's in the box? Preschoolers consider ambiguity, expected value, and potential to inform future decision in explore-exploit tasks. *Open Mind*, 7, 855-878. https://doi.org/10.1162/opmi_a_00110

Colantonio^a, J., Bascandzief^a, I., Theobald, M., Brod, G., & **Bonawitz**, E. (2023) Seeing the error in my "Bayes": A Quantified Degree of Belief Change Correlates with Children's Pupillary Surprise Responses Following Explicit Predictions. *Entropy*, 25(2), 211. <https://doi.org/10.3390/e25020211>

Kominsky^a, J., Bascandzief^a, I., Shafto, P., & **Bonawitz**, E. (2023) Talk of the Town Mobile App Platform: New method engaging family in STEM learning and research in homes and communities. *Frontiers in Psychology, Developmental Psychology*, 14, 1110940.. <https://doi.org/10.3389/fpsyg.2023.1110940>

LoBue, V., **Bonawitz**, E., Leotti^a, L., Fefferman, N. (2023). How Children Develop Healthy Behavioral Choices to Promote Illness Prevention. *Current Directions in Psychological Science*, 32(1), 3-9. <https://doi.org/10.1177/09637214221141847>

Wang^a, J. J., & **Bonawitz**, E. (2022). Children integrate task difficulty and reward probability when deciding to take on a task. *Journal of Cognition and Development* 24(3), 341-353. <https://doi.org/10.1080/15248372.2022.2152032>

Colantonio^a, J., Bascandzief^a, I., Theobald, M., Brod, G., & **Bonawitz**, E. (2022) Priors, Progression, and Predictions in Science Learning: Theory-Based Bayesian Models of Children's Revising Beliefs of Water Displacement. *IEEE Transaction on Cognitive and Developmental Systems*, 15(3), 1487-1500. [10.1109/TCDS.2022.3220963](https://doi.org/10.1109/TCDS.2022.3220963)

Bass^a, I., Smith, K., **Bonawitz**, E., & Ullman, T.D. (2022). Partial mental simulation explains fallacies in physical reasoning. *Cognitive Neuropsychology. Special Issue: Intuitive Physics Within the Landscape of the Mind*. (Ed. Jason Fischer). Volume 38 (7-8), p. 413-424. <https://doi.org/10.1080/02643294.2022.2083950> . [Preprint]

Bass^a, I., Hawthorne-Madell, D., Goodman, N., **Bonawitz**, E., & Gweon, H. (2022) The effects of information quality and teachers' knowledge on evaluations of under-informative pedagogy. *Cognition*, 222: 104999. <https://doi.org/10.1016/j.cognition.2021.104999>

Kominsky^a, J., Reardon, D., & **Bonawitz**, E. (2022). Intuitive judgements of 'Overreaction' and their relationship to compliance with public health measures. *Journal of Applied Research in Memory and Cognition*, 10.4: 542-553. <https://doi.org/10.1016/j.jarmac.2021.11.001>

Colantonio^a, J., Durkin, K., **Bonawitz**, E., & Shafto, P. (2022) Intentional Selection Assumption. *Frontiers*: 4664. <https://doi.org/10.3389/fpsyg.2021.569275>

Kominsky^a, J., Begus^a, K., Bass^a, I., Colantonio^a, J., Leonard, J.A., Mackey, A.P., **Bonawitz**, E. (2021) Organizing the methodological toolbox: Lessons learned from implementing developmental methods online. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.702710>

- Leotti^a, L. Pochinki, N., Reis, D., **Bonawitz**, E., & LoBue, V. (2021) Learning about Germs in a Global Pandemic: Children's Knowledge and Avoidance of Contagious Illness Before and After COVID-19. *Cognitive Development*, 59, 101090. <https://doi.org/10.1016/j.cogdev.2021.101090>
- Kominsky^a, J., Shafto, P., & **Bonawitz**, E. (2021) "There's something inside": Children's intuitions about animate agents. *PLoS one*, 16.5: e0251081. <https://www.nature.com/articles/s41598-020-77883-5>
- Wang^a, J., Yang^a, Y., Macias^a, C., & **Bonawitz**, E. (2021) Children with more immature intuitive theories seek domain-relevant information. *Psychological Science* 32.7: 1147-1156. <https://doi.org/10.1177/0956797621994230>
- Daubert^a, E.N, Yu^a, Y., Grados^a, M., Shafto, P., & **Bonawitz**, E. (2020) Pedagogical questions promote causal learning in preschoolers. *Nature Scientific Reports* 10.1: 1-8.
- Persuad^a, K., Macias^a, C., Hemmer, P., & **Bonawitz**, E. (2020) Episodic Memory Error in Adults and Preschoolers: Category Expectations Influence Episodic Memory for Color. *Cognitive Psychology*, 124: 101357. <https://doi.org/10.1016/j.cogpsych.2020.101357>
- Wilson, B., **Bonawitz**, E., Costa, V., & Ebitz, B. (2020) Balancing exploration and exploitation with information and randomization. *Current Opinions in Behavioral Science*, 38: 49-56. <https://doi.org/10.1016/j.cobeha.2020.10.001>
- Doan^a, T., Castro^a, A., **Bonawitz**, E., & Denison, S. (2020) "Wow, I did it!": Unexpected success increases preschoolers' exploratory play on a later task. *Journal of Cognitive Development*, 55, 100925. <https://doi.org/10.1016/j.cogdev.2020.100925>
- Begus, K., & **Bonawitz**, E. (2020) The rhythm of learning: theta oscillations as an index of active learning in infancy. *Developmental Cognitive Neuroscience*, 45, 100810. <https://doi.org/10.1016/j.dcn.2020.100810>
- Sheskin, M., Scott, K., Mills, C., Bergelson, E., **Bonawitz**, E., Spelke, E., . . . Schulz, L. (2020). Online Developmental Science to Foster Innovation, Access, and Impact. *Trends in Cognitive Science*, 24(9), 675-678. <https://doi.org/10.1016/j.tics.2020.06.004>
- Bonawitz**, E.B., Shafto, P., Yu^a, Y., Bridgers^{1a}, S., & Gonzalez^a, A. (2020) Children Change Their Answers in Response to Neutral Follow-Up Questions by a Knowledgeable Asker. *Cognitive Science*, 44(1), e12811. <https://doi.org/10.1111/cogs.12811>
- Walker, C., Rett, A., & **Bonawitz**, E. (2020) Object design influences preschooler and adult's relational causal inferences. *Psychological Science*, 31(2), 129-138. <https://doi.org/10.1177/0956797619898134>
- Yu^a, Y., Shafto, P., & **Bonawitz**, E. (2020) Inconvenient samples: Modeling Biases Related to Parental Consent by Coupling Observational and Experimental Results. *Open Mind*, 4, 13-24. https://doi.org/10.1162/opmi_a_00031

^{1a} When collaborating with trainees who collect the majority of the data, first authorship is given to students, and I take last authorship position. If the majority of data are collected with another lab (either by me or a collaborator), but a trainee is still involved in the project, I take a middle author position.

Persaud, K., Bass, L., Colantonio, J., Macias, C., & **Bonawitz**, E. (2019) Opportunities and Challenges integrating resource-rational analysis with developmental perspectives. Response to Lieder and Griffiths, *Behavior and Brain Sciences*, 43. <https://doi.org/10.1017/S0140525X19001560>

Bonawitz, E., Ullman, T., Bridgers^a, S., Gopnik, A., & Tenenbaum, J.B. (2019) Chicken-and-egg: A computational, historical, and behavioral case study of micro-theory change in the domain of magnetism. *Cognitive Science*, 43(8), e12765. <https://doi.org/10.1111/cogs.12765>

Bass^a, L., Gopnik, A., Hanson^a, M., Ramarajan^a, D., Shafto, P., Wellman, H., & **Bonawitz**, E. (2019). Children's developing theory of mind and pedagogical evidence selection. *Developmental psychology*, 55(2), 286. <https://doi.org/10.1037/dev0000642>

Yu^a, Y., Landrum, A., **Bonawitz**, E., & Shafto, P. (2018) Questioning supports effective transmission of knowledge and increased exploratory learning in pre-kindergarten children. *Developmental Science*, 21(6), e12696. doi: 10.1111/desc.12696

Lombrozo, T., **Bonawitz**, E., Scalise^a, N.R. (2018) Young children's learning and generalization of teleological and mechanistic explanations. *Journal of Cognition and Development*. 19(2), P.1-13. <https://doi.org/10.1080/15248372.2018.1427099>

Yu^a, Y., Cheng, S., Shafto, P., **Bonawitz**, E., Corriveau, K., Xu, F., Golinkoff, R., & Hirsh-Pasek, K. (2018) The Theoretical and Methodological Opportunities Afforded by Guided Play With Young Children. *Frontiers 9: 1152* (p. 1-8). doi: 10.3389/fpsyg.2018.01152

Yu^a, Y., **Bonawitz**, E., & Shafto, P. (2017) Pedagogical Questions in Parent-Child Conversations. *Child Development*, 1-15. doi: 10.1111/cdev.12850

Walker, C., **Bonawitz**, E., & Lombrozo, T. (2017) Effects of explaining on children's preference for simpler hypotheses. *Psychonomic Bulletin and Review*, 24(5), 1538–1547. doi:10.3758/s13423-016-1144-0

Bonawitz, E. & Shafto, P. (2016) Computational models of learning during development, social influences. *Current Opinions in Behavioral Science*, 7, 95-100. doi: 10.1016/j.cobeha.2015.12.008

Gopnik, A., & **Bonawitz**, E., (2015) Bayesian models of child development. *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. doi: 10.3389/fpsyg.2015.00867

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, 153-169. doi: 10.1016/bs.plm.2015.03.006

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. doi: 10.1016/j.tics.2014.06.006

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. doi: 10.1016/j.cogpsych.2014.06.003

Denison, S., **Bonawitz**, E., Gopnik, A., & Griffiths, T. (2013) Rational variability in children's causal inferences: The Sampling Hypothesis. *Cognition*, 126, 285-300. doi: 10.1016/j.cognition.2012.10.010

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. doi: 10.1016/j.cogpsych.2011.12.002

Bonawitz, E.B., & Lombrozo, T. (2012) Occam's Rattle: Children's use of simplicity and probability to constrain inference. *Developmental Psychology*, 48, 1156-1164. doi: 10.1037/a0026471

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. doi: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. doi: 10.1016/j.cognition.2010.10.001 (*joint 1st 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. doi: 10.1016/j.cognition.2009.12.001

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. doi: 10.1037/0012-1649.44.5.1266

Shafto, P., Kemp, C., **Bonawitz**, E.B., Coley, J.D., & Tenenbaum, J.B. (2008) Inductive reasoning about causally transmitted properties. *Cognition*, 109(2), 175-192. doi: 10.1016/j.cognition.2008.07.006

Schulz, L., **Bonawitz**, E.B., & Griffiths, T.L. (2007) Can being scared cause tummy aches? Naive theories, ambiguous evidence and preschoolers' causal inferences. *Developmental Psychology*, Sep Vol 43(5), 1124-1139. doi: 10.1037/0012-1649.43.5.1124

Schulz, L., & **Bonawitz**, E.B. (2007) Serious fun: Preschoolers play more when evidence is confounded. *Developmental Psychology*, Jul Vol 43(4), 1045-1050. doi: 10.1037/0012-1649.43.4.1045

Refereed Paper Proceedings (43)

(Peer reviewed, ~5000 word papers, published in conference proceedings)

Chu^a, J., O’Keeffe^a, M., Liu^a, S.K., **Bonawitz**, E., & Ullman, T.D. (2025) Stumped! Learning to think outside the box in 3-7-year-old children. In A. Ruggeri, D. Barner, C. Walker, & N. Bramley (Eds.) *Proceedings of the 47th Annual Meeting of the Cognitive Science Society*. San Francisco, CA, USA.

Colantonio^a, J., Park, A., Delgado Reyes, L., Sharp, S., Koepp A., **Bonawitz**, E. and Mackey, A. (2025) “Question Asking Practice Fosters Aspects of Curiosity in Young Children,” Paper presented at the *Annual Meeting of the American Educational Research Association*, Colorado, USA.

Bascandziev^a, I., Shafto, P., & **Bonawitz**, E., (2024) Parents modify their prosody when asking questions with pedagogical intent. In L. K. Samuelson, S. Frank, M. Toneva, A. Mackey, & A. Hazeltine (Eds.), *Proceedings of the 46th Annual Conference of the Cognitive Science Society*. Rotterdam NL: Cognitive Science Society.

Lorch^a, L., **Bonawitz**, E., & Brod, G., (2024) Challenging the control-of-variables strategy: How confounded comparisons can support children’s science learning. In L. K. Samuelson, S. Frank, M. Toneva, A. Mackey, & A. Hazeltine (Eds.), *Proceedings of the 46th Annual Conference of the Cognitive Science Society*. Rotterdam NL: Cognitive Science Society.

Adreuccioli, L., Mazor, S., Begus, K., **Bonawitz**, E., Denison, S., & Walker, C. (2024) Young children adapt their search behavior for necessary versus merely possible outcomes. In L. K. Samuelson, S. Frank, M. Toneva, A. Mackey, & A. Hazeltine (Eds.), *Proceedings of the 46th Annual Conference of the Cognitive Science Society*. Rotterdam NL: Cognitive Science Society.

Bass^a, I., Smith, K., **Bonawitz**, E., & Ullman, T. (2021). *Efficient partial simulation quantitatively explains deviations from optimal physical predictions*. Presentation at refereed workshop as part of the 35th Annual Conference on Neural Information Processing Systems: *Physical Reasoning and Inductive Biases for the Real World*.

Bass^a, I., Mahaffey^a, E., & **Bonawitz**, E. (2021). Do you know what I know? Children use informants’ beliefs about their abilities to calibrate choices during pedagogy. In T. Fitch, C. Lamm, H. Leder, & K. Tessmar-Raible (Eds.), *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*. Vienna, AT: Cognitive Science Society

Bascandziev^a, I., Shafto, P., & **Bonawitz**, E. (2021). The sound of pedagogical questions. In T. Fitch, C. Lamm, H. Leder, & K. Tessmar-Raible (Eds.), *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*. Vienna, AT: Cognitive Science Society

Kominsky, J., Reardon, D., & **Bonawitz**, E. (2021). If it works we didn’t need it: Intuitive judgements of ‘overreaction’. In T. Fitch, C. Lamm, H. Leder, & K. Tessmar-Raible (Eds.), *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*. Vienna, AT: Cognitive Science Society

Rett, A., **Bonawitz**, E., & Walker, C. (2019) The Design of the Learning Environment Shapes Preschoolers’ Causal Inference. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.) *Proceedings of*

the 41st Annual Conference of the Cognitive Science Society. Montreal, QB: Cognitive Science Society.

Choi^a, K., Grados^a, M., **Bonawitz**, E. (2019) Observing child-led exploration improves parents' causal inferences. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.) *Proceedings of the 41st Annual Conference of the Cognitive Science Society*. Montreal, QB: Cognitive Science Society.

Persaud^a, K., Macias^a, C., Hemmer, P., & **Bonawitz**, E. (2019) Age-Related Differences in the Influence of Category Expectations on Episodic Memory in Early Childhood. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.) *Proceedings of the 41st Annual Conference of the Cognitive Science Society*. Montreal, QB: Cognitive Science Society.

Wang^a, J., & **Bonawitz**, E. (2019) Active information seeking using the Approximate Number System. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.) *Proceedings of the 41st Annual Conference of the Cognitive Science Society*. Montreal, QB: Cognitive Science Society.

Jean^a, A., Daubert^a, E., Yu^a, Y., Shafto, P., & **Bonawitz**, E. (2019) Pedagogical Questions Empower Exploration. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.) *Proceedings of the 41st Annual Conference of the Cognitive Science Society*. Montreal, QB: Cognitive Science Society.

Bass^a, I., Shafto, P., & **Bonawitz**, E. (2018) That'll Teach 'em: How Expectations about Teaching Styles may Constrain Inferences. In Kalish, C., Rau, M., Zhu, J., & Rogers, T.T. (Eds.) *Proceedings of the 40th Annual Conference of the Cognitive Science Society*. Madison, WI: Cognitive Science Society.

Choi^a, K., Lapidow^a, E., Austin, J., Shafto, P. & **Bonawitz**, E. (2018) Preschoolers are more likely to direct questions to adults than to other children (or selves) during spontaneous conversational act. In Kalish, C., Rau, M., Zhu, J., & Rogers, T.T. (Eds.) *Proceedings of the 40th Annual Conference of the Cognitive Science Society*. Madison, WI: Cognitive Science Society.

Colantonio^a, J., & **Bonawitz**, E. (2018) Awesome play: Awe increases preschoolers exploration and discovery. In Kalish, C., Rau, M., Zhu, J., & Rogers, T.T. (Eds.) *Proceedings of the 40th Annual Conference of the Cognitive Science Society*. Madison, WI: Cognitive Science Society.

Yu^a, Y. **Bonawitz**, E., & Shafto, P. (2017) Inconvenient samples: Modeling the effects of non-consent by coupling observational and experimental results. In Gunzelmann, G., Howes, A., Tenbrink, T., & Davelaar, E. (Eds.) *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. London, UK: Cognitive Science Society, 1406-1411.

Bass^a, L., **Bonawitz**, E., Shafto, P., Ramarajan^a, D., Gopnik, A., & Wellman, H. (2017) I know what you need to know: Children's developing theory of mind and pedagogical evidence selection. In Gunzelmann, G., Howes, A., Tenbrink, T., & Davelaar, E. (Eds.) *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. London, UK: Cognitive Science Society, 99-104.

Bass^a, L., **Bonawitz**, E., & Gweon, H. (2017) Didn't know, or didn't show? Preschoolers consider epistemic state and degree of omission when evaluating teachers. In Gunzelmann, G., Howes, A., Tenbrink, T., & Davelaar, E. (Eds.) *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. London, UK: Cognitive Science Society, 105-110.

Baker^a, L.J., Lobue, V., **Bonawitz**, E., & Shafto, P. (2017) Towards Automated Classification of Emotion Facial Expressions. In Gunzelmann, G., Howes, A., Tenbrink, T., & Davelaar, E. (Eds.) *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. London, UK: Cognitive Science Society, 1574-1579.

Yu^a, Y., **Bonawitz**, E., & Shafto, P. (2016) Questions in informal teaching: A study of mother-child conversations. In Grodner, D., Mirman, D., Papafragou, A., & Trueswell, J. (Eds.) *Proceedings of the 38th Annual Conference of the Cognitive Science Society*. Philadelphia, PA: Cognitive Science Society, 1086-1091.

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, 708-713.

Rhodes, M., **Bonawitz**, E., Shafto, P., & Chen^a, A. (2014) Controlling the message: Preschoolers' use of evidence to teach and deceive others. In Bello, P., Cuarini, M., McShane, M., & Scassellati, B. (Eds.) *Proceedings of the Thirty-sixth Cognitive Science Society*. Austin, TX: Cognitive Science Society, 213-218.

Bonawitz, E.B., Ullman^a, 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. In *Development and Learning and Epigenetic Robotics (ICDL), 2012 IEEE International Conference*, San Diego, CA: IEEE, 1-6.

Pham^a, K., **Bonawitz**, E.B., & Gopnik, A. (2012). Seeing who sees: Contrastive access helps children reason about other minds. In Miyake, N., Peebles, D., & Cooper, R. (Eds.) *Proceedings of the Thirty-fourth Cognitive Science Society*, Sapporo, Japan: Cognitive Science Society, 2180-2185.

Gonzalez^a, A. Shafto, P., **Bonawitz**, E.B., & Gopnik, A. (2012) Is that your final answer? The effects of neutral queries on children's choices. In Miyake, N., Peebles, D., & Cooper, R. (Eds.) *Proceedings of the Thirty-fourth Cognitive Science Society*, Sapporo, Japan: Cognitive Science Society, 1614-1619.

Bonawitz, E.B., Denison^a, S., Chen^a, A., Gopnik, G., & Griffiths, T.L. (2011) A simple sequential algorithm for approximating Bayesian inference. In Carlson, L., Holscher, C., & Shipley, T. (Eds.) *Proceedings of the Thirty-third Cognitive Science Society*, Boston, MA: Cognitive Science Society, 2463-2469.

Muentener, P., **Bonawitz**, E.B., Horowitz^a, A., & Schulz, L.E. (2011) Mind the Gap: Dispositional Agency Facilitates Toddlers' Causal Representations. In Carlson, L., Holscher, C., & Shipley, T. (Eds.) *Proceedings of the Thirty-third Cognitive Science Society*, Boston, MA: Cognitive Science Society, 1801-1806.

Bonawitz, E.B., & Griffiths, T. (2010) Deconfounding Hypothesis Generation and Evaluation in Bayesian Models. In Camtrabone, T., & Ohlsson, S. (Eds.) *Proceedings of the*

Thirty-second Cognitive Science Society, Portland, OR: Cognitive Science Society, 2260-2265.

Denison^a, S., **Bonawitz**, E.B., Gopnik, A., & Griffiths, T. (2010) Preschoolers sample from probability distributions. In Camtrabone, T., & Ohlsson, S. (Eds.) *Proceedings of the Thirty-second Cognitive Science Society*, Portland, OR: Cognitive Science Society, 2272-2277.

Bonawitz, E.B., Horowitz^a, A., Ferranti^a, D., Schulz, L. (2009) The Block Makes It Go: Causal Language Helps Toddlers Integrate Prediction, Action, and Expectations about Contact Relations. In Taatgen, N., van Rijn, H., Schomaker, L., & Nerbonne, J., (Eds.) *Proceedings of the Thirty-first Cognitive Science Society*, Amsterdam, Netherlands: Cognitive Science Society, 81-86.

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. In Taatgen, N., van Rijn, H., Schomaker, L., & Nerbonne, J., (Eds.) *Proceedings of the Thirty-first Cognitive Science Society*, Amsterdam, Netherlands: Cognitive Science Society, 1575-1580. *Equal author contribution.

Bonawitz, E.B. & Schulz, L.E. (2008) Why Learning is Hard. In Beal, J., Bellow, P., Cassimatis, N., Coen, M., & Winston, P. (Eds.) *AAAI Fall Symposium: Naturally-Inspired Artificial Intelligence*. Menlo Park, CA: AAAI, 27-34.

Bonawitz, E.B., Chang^a, I., Clark^a, C., & Lombrozo, T. (2008) Ockham's razor as inductive bias in preschoolers causal explanations. In *Development and Learning, 2008. ICDL 2008. 7th IEEE International Conference on Development and Learning*, IEEE, 7-12.

Bonawitz, E.B., Fischer^a, A., Schulz, L.E. (2008) Training a Bayesian: Three-and-a-half-year-olds' reasoning about Ambiguous Evidence. In Sloutsky, V., Love, B., & McRae, K. (Eds.) *Proceedings of the Thirtieth Annual Conference of the Cognitive Science Society*, 837-842.

Bonawitz, E.B., Lim^a, S., & Schulz, L.E. (2007) Weighing the Evidence: Children's theories of Balance affect play. In McNamara, D., & Trafton, G. (Eds.) *Proceedings of the Twenty-Ninth Annual Conference of the Cognitive Science Society*, 113-118.

Bonawitz, E.B., & Schulz, L. (2007) Children's Rational Exploration. In Morrison, C., & Oates, T. (Eds.) *Computational Approaches to Representation Change During Learning and Development: Papers from the AAAI Fall Symposium*, 1-8.

Bonawitz, E.B., Griffiths, T.L., & Schulz, L. (2006) Modeling Cross-Domain Causal Learning in Preschoolers as Bayesian Inference. In Sun, R., & Miyake, N. (Eds.) *Proceedings of the Twenty-Eighth Annual Conference of the Cognitive Science Society*, 89-94. **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. In Sun, R., & Miyake, N. (Eds.) *Proceedings of the Twenty-Eighth Annual Conference of the Cognitive Science Society*, 1382-1387.

Shafto, P., Kemp, C., **Baraff**, E., Tenenbaum, J.B., and Coley, J. (2005) Context sensitive induction. In Bara, B., Barsalou, L., & Bucciarelli, M. (Eds.) *Proceedings of the Twenty-Seventh Annual Conference of the Cognitive Science Society*, 2003-2008.

Griffiths, T.L., **Baraff**, E., & Tenenbaum, J.B. (2004) Using Physical Theories to Infer Hidden Causal Structure. In Forbus, K., Gentner, D., & Regier, T. (Eds.) *Proceedings of the Twenty-Sixth Annual Conference of the Cognitive Science Society*, 500-505. **Marr Prize for Best Student Paper Honorable Mention.**

Chapters and Theses (6)

Bonawitz, E. & Ullman, T. (2024) Probabilistic Models of Development. In: Griffiths, T. L., Chater, N., & Tenenbaum, J. B. (Eds.). *Bayesian models of cognition: reverse engineering the mind* (pp. 499-516). MIT Press.

Bonawitz, E., Bass^a, L., & Lapidow^a, E. (2018) Choosing to Learn: Evidence Evaluation for Active Learning and Teaching in Early Childhood. In: Saylor M., Ganea P. (eds) *Active Learning from Infancy to Childhood*. Springer, Cham, 213-231. doi: 10.1007/978-3-319-77182-3_12

Muentner, P., & **Bonawitz**, E. (2017) The development of causal reasoning. In Waldman, M. (Ed.) *Oxford Handbook of Causal Reasoning*. Oxford, United Kingdom: Elsevier Limited. doi: 10.1093/oxfordhb/9780199399550.001.0001

Bonawitz, E.B., 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, 161-192.

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, 69-85.

Web Publishing, Invited Reviews

Bonawitz, E. (2025) "Why We Should Be Thinking About Children's Thinking". *Psychology Today*. (Invited Guest Writer)
<https://www.psychologytoday.com/us/blog/the-baby-scientist/202505/why-we-should-be-thinking-about-childrens-thinking>

Bonawitz, E. (2022) "Inquiring Minds" Review of "*Wonder: Childhood and the Lifelong Love of Science*" Author, Frank Keil. *American Scientist*.
<https://www.americanscientist.org/article/inquiring-minds>

Kominsky, J., & **Bonawitz**, E. (2021) "When you do it right, it looks like you're overreacting". *Items Insights from the Social Sciences* - Social Science Research Council
<https://items.ssrc.org/covid-19-and-the-social-sciences/covid-19-fieldnotes/when-you-do-it-right-it-looks-like-youre-overreacting/>

Bonawitz, E. (2018). Towards computational models of curiosity in cognitive development. Reply to: Curiosity as Driver of Extreme Specialization in Humans. In IEEE CDS NewsLetter. Vol 14(3), ed. Oudeyer, Pierre-Yves.

Bonawitz, E., (2020) Children's shifting responses are more than what they seem. *Blog on Learning and Development*.
<https://bold.expert/childrens-shifting-responses-are-more-than-what-they-seem/>

Bonawitz, E. (2017, video interview) *Play in childhood supports the same skills that underlie scientific reasoning*. BOLD – Blog on Learning and Development:
<http://bold.expert/play-in-childhood-supports-same-skills-that-underlie-scientific-reasoning/>

F1000 Contributor (01/19 – 12/20)

Talks and Presentations

Invited Talks

(2025) Invited Panelist* for the 2025 Cognitive Science Society 25th Anniversary Rummelhart Event. “Featuring a lineup of visionary thinkers whose work exemplifies the Rumelhart Prize’s spirit”. San Francisco, CA. *Asked to fill-in for Alison Gopnik who had to cancel due to illness

Bonawitz, E. (2025). Invited Keynote for the 2025 BCCCD conference. *The Power of Prediction: Mechanisms of children's curiosity and learning*. Budapest, Hungary.

Bonawitz, E., (2024) Keynote symposium “Curiosity-Driven Learning and Predictive Models”. *The role of prediction in children's curiosity and science learning*. International Conference on Development and Learning (ICDL). IEEE. Austin, TX.

Bonawitz, E. (2024) “How Predictive Questions Might Support Children’s Curiosity and learning”. University of Delaware School of Education Colloquium series.

Bonawitz, E. (2024) “The Power of Prediction: Mechanisms of children's curiosity and learning” UCSD Colloquium Speaker for Department of Psychology.

Bonawitz, E. (2023) Keynote. “Developing Wonder: Computational, Neurological, and Behavioral Experiments of Children's Curiosity & Learning” *Eastern Psychological Association*. March 3-5, Boston.

Bonawitz, E. (2022) Keynote: “Maintaining a Love of Learning: The Science of Questions, Curiosity, and Exploratory Play”. *Learning & the Brain Conference: "Teaching Struggling Brains: Improving Mental Health, Motivation, Focus, and Learning in a Distressed, Digital Generation"* Nov. 18-20, Boston.

Bonawitz E., (2022) Keynote: Developing Curious Minds: Computational, Neurological, and Behavioral Experiments of Children's Information Seeking for Learning. Invited Keynote Speaker. *International Mind Brain and Education Society Conference*. Montreal, Canada.

Bonawitz E., (2022) Developing Curious Minds: Computational, Neurological, and Behavioral Experiments of Children's Information Seeking for Learning. Williams College 1960 Alumni Series Invited Departmental Colloquium

Bonawitz, E. (2022) The Science of Learning: How Social Information Shapes Inferences in Early Childhood. Brown University Psychology Dpt. Seminar.

Bonawitz, E. (2021) The Science of Learning: How Social Information Shapes Inferences in Early Childhood. Columbia University Psychology Dpt. Seminar Series.

Bonawitz, E. (cancelled) Keynote speaker *California Cognitive Science Conference*. Berkeley, CA. *Cancelled due to Covid*.

Bonawitz, E. (2021) (2020, postponed due to COVID) Probabilistic Models of Development. *Developing models of the world Conference. Lorentz Center*. Leiden, Netherlands.

Bonawitz, E. (2020) Lego Idea Conference – *Creativity*. Billund, Denmark. (Virtual due to COVID)

Bonawitz, E. (2019) “*Computational/Predictive Coding and Development*.” Invited talk at FLUX Developmental Cognitive Neuroscience Congress. NY, NY.

Bonawitz, E. (2019) Invited Keynote Symposium Address at the Annual Conference of the Cognitive Science Society. “*How Curious? The Cognitive Need for Exploration and Discovery*” Montreal, Canada. (July)

Bonawitz, E. (2019) Invited Keynote Symposium Address at the Annual Conference of the Society for Philosophy and Psychology. “*Probability and Mind*.” San Diego, CA. (July)

Bonawitz, E. (2019) Invited talk at the Causality workshop at the Annual Conference of the Society for Philosophy and Psychology, “*The role of social information in children’s causal inferences*” San Diego, CA. (July)

Bonawitz, E. (2019) “The role of Pedagogical Questions in boosting preschooler’s curiosity, explanation seeking, and exploration”. Invited talk at the Princeton University Workshop, “*Curiosity, Explanation, and Exploration*”. Princeton, NJ. (June)

Bonawitz, E. (2019). “Implications of guided play (pedagogical questions) across SES.” Invited talk at the *Newark Conference on Play*. Newark, NJ. (June)

Bonawitz, E. (2019) Invited talk at “*Understanding Human and Machine Intelligence: A Workshop on Cognitive Science and AI*” May 28 - 29 in NY, NY.

Bonawitz, E. (2019) “Understanding Exploratory drives in early childhood and Clarifying the Role of Pedagogical Questions in Learning.”. Invited talk at Yale University.

Bonawitz, E. (2019) “Curiosity and Active Learning in Early Childhood”. Invited talk at Temple University.

Bonawitz, E. (2019) “Computational Cognitive Development”. Jacobs Foundation Fellowship Meeting. Dublin, Ireland.

Bonawitz, E. (2018) Curiosity in the developing mind: How prior beliefs, evidence, and affect influence preschooler’s choices to learn. University of Pennsylvania Glandt Forum. *Curiosity: Emerging Sciences and Educational Innovations*. Philadelphia, PA. (December)

Bonawitz, E. (2018) Exploration and exploitation in preschooler's play. *Understanding Exploration Exploitation Tradeoffs. Workshop for the 30th Annual Conference of the Cognitive Science Society*. Madison, WI. (July)

Bonawitz, E. (2018) Guiding Guided Play: Questions, Curiosity, and Learning. Guided Play Workshop. Newark, NJ. (June)

Bonawitz, E. (2018) Thinking outside the box: Understanding and Encouraging Curious Play. Jacobs Foundation Fellowship Meeting. Marbach Castle. (April)

Bonawitz, E. & Shafto, P. (2017) *The data science of human and machine learning*. Office of the President, Rutgers University. New Brunswick, NJ. (November)

Bonawitz, E. (2017) *Curiosity in Early Childhood*. Meeting sponsored by the Jacobs Foundation and the LEGO Foundation at the Marbach Castle, Switzerland. (November)

Bonawitz, E. (2017) *Computational models of development*. Harvard University Computational Models of Social-Cognition Summer School (July)

Bonawitz, E. (2017) *Principles underlying guided learning*. Pre-Conference on Key Principles of Playful Learning. Philadelphia, PA (June)

Bonawitz, E. (2017) Panelist: "What is Playful Learning". Conference on Playful Learning: *Defining & Designing Playful Learning for Children, Families, and Communities*. Temple University and William Penn Foundation. Philadelphia, PA. (June)

Bonawitz, E. (2017) *Children's reasoning about evidence: Social inferences and sampling*. Rutgers New Brunswick, RuCCS talk series. (April)

Bonawitz, E. (2017) *Learning in Early Childhood: Evidence an exploration*. Jacobs Fellowship SRCD Pre-conference Austin, TX (April).

Bonawitz, E. (2017) *Science of Learning: Exploration and Social factors*. Science of Learning Conference with Philadelphia *Playscape* opening (June)

Bonawitz, E. (2016) *The Sampling Hypothesis*. New York University, Psychology Department – ConCats. NY, NY.

Bonawitz, E. (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.** (2016) *Rational action: Ambiguity, expectation, and information gain influence preschooler's choices in exploration*. Talk as part of a refereed Cognitive Science Society Conference Workshop: *Active learning: Cognitive development, education, and computational models*. Philadelphia, PA.

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

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

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

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

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

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

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

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

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

Bonawitz, E. (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. (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 & 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 Abstract Conference Presentations

Gall, C., **Bonawitz, E.**, & Begus, K. (2025, May). *New methodological tools for measuring curiosity in infancy*. Talk submitted as part of a refereed symposium for the 2025 Society for Research in Child Development Biennial Meeting, “Novel Approaches to Measuring Curiosity and Related Processes in Infants and Children”. Minneapolis, MN.

Liu, Y., Dela Cruz, J., Chu., J., Liquin, E., **Bonawitz, E.**, & Mills, C.M. (2025) *Explanation Quality Matters: 3-to-8-year-olds link explanation satisfaction, perceptions of learning and curiosity*. Talk submitted as part of a refereed symposium for the 2025 Society for Research in Child Development Biennial Meeting, Factors influencing Children’s Questions and Explanations. Minneapolis, MN.

Bass, I., **Bonawitz, E.**, & Ullman, T.D. (2025, May). *Children’s Evaluations of Automaticity in Teaching*. Talk submitted as part of a refereed symposium for the 2025 Society for Research in Child Development Biennial Meeting, Children's Understanding of Teaching. Minneapolis, MN.

Liu, S., Chu, J., O’Keeffe, M., **Bonawitz, E.**, & Ullman, T. (2025, May). *Stumped! How well can 3-8-year-old children learn to think outside the box?*. Poster to be presented at the 2025 Society for Research in Child Development Biennial Meeting, Minneapolis, MN.

Callahan, M. Leotti, L., Fefferman, N., **Bonawitz, E.**, LoBue (2025, May) *How Do Children Learn and Reason About Contagion? The Development of Causal Mechanistic Reasoning of Germ Transmission*. Poster to be presented at the 2025 Society for Research in Child Development Biennial Meeting, Minneapolis, MN.

Bascandziev, I., Abutto, A., Walker, C., & **Bonawitz, E.** (2025, May). *Consistency Monitoring and Domain-Specific Learning*. Paper presented at the 2025 Society for Research in Child Development Biennial Meeting, Minneapolis, MN

Bascandziev, I., Brod, G., Shafto, P., & **Bonawitz, E.** (2025). *Young children learn about the principles of water displacement via extreme case thought experiments*. Poster presented at the 2025 SRCD Biennial Meeting, Minneapolis, MN

Lörch, L., **Bonawitz, E.**, & Brod, G. (2024) *Better than control-of-variables? Confounded comparisons in children’s hypothesis testing*. (Part of “Understanding the prerequisites for learning from hypothesis testing”). Talk presented at the annual meeting of the EARLI SIG03 Conceptual Change Conference. Germany.

Bascandziev, I., Abutto, A., Walker, C., & **Bonawitz, E.** (2024). *Roles for error detection in theory revision*. Talk presented at the annual meeting of the Society for Philosophy and Psychology. Purdue.

Andreuccioli, L., Mazor, S., Begus, K., **Bonawitz, E.**, Denison, S., & Walker, C. (2024). *Young children's ability to represent alternative possibilities*. Talk presented at the annual meeting of the Society for Philosophy and Psychology. Purdue.

Abutto, A., Bascandzhev, I., Walker, C., & **Bonawitz, E.** (2024). *From Possible to Pause-able: Children's hesitancy may mark implicit skepticism of incorrect intuitive beliefs*. Poster presented at the meeting of the Cognitive Development Society, Pasadena, CA.

Bascandzhev, I., Abutto, A., Walker, C., & **Bonawitz, E.** (2024). *Mind over matter: Conflict monitoring and science learning*. Poster presented at the meeting of the Cognitive Development Society, Pasadena, CA.

Wang-Zhao, J., Chu, J., **Bonawitz, E.**, & Ullman, T. D. (2024, March). *Sensible nonsense: Children's explanations of physical violations vary by age*. Poster presented at the Cognitive Development Society Biennial Conference, Pasadena, CA, U.S.A.

Chu, J*., Rule, J*., Goddu, M., Pinter, V., Reagan, ER., **Bonawitz, E.**, Gopnik, A., & Ullman, T. (2024, March). *Beyond explore-exploit: Creative curiosity in play*. Poster presented at the 2024 Biennial Meeting of the Cognitive Development Society. Pasadena, CA. *Joint first authors.

Andreuccioli, L., Mazor, S., Begus, K., **Bonawitz, E.**, & Walker, C.M. (2024, March). "Young children's ability to represent alternative possibilities." Cognitive Development Society, Pasadena, CA.

Holstein, E., Theobald, M., Colantonio, J., Bascandzhev, I., **Bonawitz, E.**, & Brod, G. (2024, March 18–20). Do Reflection Prompts Promote Children's Conflict Monitoring and Revision of Misconceptions? [Conference presentation]. 11th annual conference of the Gesellschaft für Empirische Bildungsforschung (GEBF - Association of Empirical Educational Research), Potsdam, Germany.

Theobald, Colantonio, Bascandzhev, **Bonawitz**, & Brod (2023). Predicting promotes revision of misconceptions: Evidence from Bayesian models and pupillary surprise. Presentation in the Invited Symposium "Understanding and alleviating difficulties in science learning: an intra-individual perspective" at EARLI 2023, August 2023.

Bascandzhev, I., Walker, C., & **Bonawitz, E.** (2023). Thought experiments as a tool for teaching scientific concepts. Invited Symposium "Understanding and alleviating difficulties in science learning: an intra-individual perspective" at the Biennial EARLI Conference, Thessaloniki, Greece.

Colantonio, J., Park, A., Delgado-Reyes, L., Sharp, S., **Bonawitz, E.**, & Mackey, A. (2023, March). *Question Asking Increases Children's Valuation of New Information* [Oral Presentation]. in A. Haber & H. Puttre (Chairs), *Fostering Children's Curiosity in Early Childhood* [Symposium]. Society for Research in Child Development, Salt Lake City, UT.

Bass, I., **Bonawitz, E.**, & Ullman, T. D. (2022). Adults' evaluations of rote and reflective teachers. Member abstract submitted to Proceedings of the 44th Annual Conference of the Cognitive Science Society. Toronto, Canada.

Bascandziev, I., Shafto, P., & **Bonawitz**, E., (2022). Can children recognize pedagogical intent in the prosody of speech? Poster presented at the 44th Annual Conference of the Cognitive Science Society. Toronto, Canada.

Colantonio, J., Park, A., Delgado, L., Sharp, S., **Bonawitz**, E., & Mackey, A. (2022, May). *Science Training That Encourages Question Asking Increases Young Children's Valuation of New Information* [Oral Presentation]. in L. Heiphetz (Chair), *The Multifaceted Consequences of Curiosity in Social and Cognitive Domains* [Symposium]. Association for Psychological Science, Chicago, IL.

Persaud, K. & **Bonawitz**, E. (2022). "Dissociating the Impact of Object-Color Expectations and Object-Color Violations on Visual Feature Memory." Talk presented at the Annual Meeting of the Vision Sciences Society, St. Pete's Beach, FL.

Bass, I., & **Bonawitz**, E. (2022). Early environments and exploration in the preschool years. Poster at the 2022 Meeting of the Cognitive Development Society. Madison, WI.

Bascandziev, I., Shafto, P., & **Bonawitz**, E. (2022). Who is the teacher? Young children can differentiate between pedagogical and information-seeking questions based on prosody alone. Paper presented at BCCCD [Conference held virtually due to COVID-19].

Kominsky, J. F., Reardon, D., & **Bonawitz**, E. (2022) "Do children make pedagogical interpretations of counterfactual questions?" Presentation, BCCCD, Budapest, Hungary.

Goddu, M. K., Rule, J. S., **Bonawitz**, E., Gopnik, A., & Ullman, T. (2022). Fun isn't easy: Children optimize for difficulty when "playing for fun" vs. "playing to win" in a game design task. Virtual presentation at the *Budapest CEU Conference on Cognitive Development*, virtual conference.

Bass, I., Smith, K., **Bonawitz**, E., & Ullman, T. (2021, December). Efficient partial simulation quantitatively explains deviations from optimal physical predictions. Presentation at refereed workshop as part of the 35th Annual Conference on Neural Information Processing Systems, *Physical Reasoning and Inductive Biases for the Real World*. [Conference held virtually due to COVID-19]

Bass, I., Shafto, P., & **Bonawitz**, E. (2021, June). How expectations about teaching styles may shape inferences and exploration. Poster at the 47th Annual Meeting of the Society for Philosophy and Psychology. [Conference held virtually due to COVID-19]

Persaud, K. & **Bonawitz**, E. (November, 2021). "How far does having expectations go? Evaluating the Influence of Color Expectations on Memory for Object-Color and Object-Shape." Talk presented at the Annual Meeting of the Psychonomic Society, Virtual Meeting.

Persaud, K. & **Bonawitz**, E. (May, 2021). "Just How Great are Those Expectations? Evaluating the Influence of Object-Color Violations on Visual Memory for Object-Shape" Poster presented at the Annual Meeting of the Vision Sciences Society, Virtual Meeting.

Colantonio, J., Sharp, S., Mackey, A., & **Bonawitz**, E. (2021, April). Promoting Question Asking to Foster Curiosity: An Intervention Study. Symposium paper presented at the Society for Research in Child Development. [Conference held virtually due to COVID-19]

Colantonio, J., Bascandzhev, I., Theobald, M., Brod, G., **Bonawitz**, E. (2021, April). Theory-Based Bayesian Models of Elementary School Children's Pupillary Surprise. Symposium paper presented at the Society for Research in Child Development. [Conference held virtually due to COVID-19]

Bascandzhev, I., Bridgers, S., Shafto, P., & **Bonawitz**, E. (2021). The Sound of Pedagogy: Acoustic Features of Pedagogical and Information-Seeking Questions. Paper presented at the 11th Annual BCCCD Conference. Vienna, Austria. [Conference held virtually due to COVID-19].

Bass, I., Mahaffey, E., & **Bonawitz**, E. (2021). *How teachers' assumptions about learners' abilities shape inferences in pedagogical reasoning*. Presentation at the 11th Annual BCCCD meeting, Budapest, Hungary. [Conference held virtually due to COVID-19].

Bascandzhev^a, I., Shafto, P., & **Bonawitz**, E. (2020, July). *Prosodic features carry information about a question's intent*. Poster presented at the 42nd Annual Conference of the Cognitive Science Society. Toronto, Canada. [Conference held virtually due to COVID-19]

Begus^a, K. & **Bonawitz**, E. (2021) (2020 postponed due to COVID). Investigating infants' sensitivity to confounded information in a causal reasoning task. *Society for Philosophy and Psychology*, Princeton, New Jersey.

Colantonio^a, J., Bascandzhev^a, I., Theobald, M., Brod, G., & **Bonawitz**, E. (2020, July) Modeling pupillary surprise response in elementary school children with theory-based Bayesian models. Poster presented at the 42nd Annual Conference of the Cognitive Science Society. Toronto, Canada. [Conference held virtually due to COVID-19]

Yu^a, Y., Shafto, P., & **Bonawitz**, E. (2020, June). *Children make different inductive generalizations following sequential versus diverse sampling*. Abstract submitted to the 26th Biennial Meeting of the ISSBD, Rhodes, Greece.

Bass^a, I., Bedoya^a, A., & **Bonawitz**, E. (2020). Early environments and exploration in the preschool years. In S. Denison, M. Mack, Y. Xu, & B. C. Armstrong (Eds.) Proceedings of the 42nd Annual Virtual Conference of the Cognitive Science Society. Toronto, ON: Cognitive Science Society. [Conference held virtually due to COVID-19]

Persaud^a, K & **Bonawitz**, E. (2020). Great Expectations: Evaluating the role of object-color expectations on visual memory. In S. Denison, M. Mack, Y. Xu, & B. C. Armstrong (Eds.) Proceedings of the 42nd Annual Virtual Conference of the Cognitive Science Society. Toronto, ON: Cognitive Science Society. [Conference held virtually due to COVID-19]

Macias, C., & **Bonawitz**, E. (2020). Memory enhancement from surprise: Investigating threshold and incremental accounts. In S. Denison, M. Mack, Y. Xu, & B. C. Armstrong (Eds.) Proceedings of the 42nd Annual Virtual Conference of the Cognitive Science Society. Toronto, ON: Cognitive Science Society. [Conference held virtually due to COVID-19]

Bass^a, I., Shafto, P., & **Bonawitz**, E. (2020). How expectations about teachers shape children's playful learning. Poster submitted to the 2020 Annual Convention of the American Psychological Association, Washington, DC.

Bass^a, I., Shafto, P., & **Bonawitz**, E. (2020). How expectations about teaching styles may shape inferences and exploration. Paper submitted to the 46th Annual Meeting of the Society for Philosophy and Psychology, Princeton, NJ

Persaud^a, K & **Bonawitz**, E. (2020). Great Expectations: Evaluating the role of object-color expectations on visual memory. *Poster to be presented at the 20th Annual Meeting of Vision Sciences Society*, St. Pete Beach, FL.

Yu^a, Y., **Bonawitz**, E., & Shafto, P. (2020) Children Make Different Inductive Generalizations Following Sequential Versus Diverse Sampling. *International Society for the Study of Behavioural Development*.

Jean^a, A., Daubert^a, E., Yu^a, Y., Shafto, P., & **Bonawitz**, E. (2020). *Children's spontaneous question-asking and help-seeking behaviors following pedagogical questions or direct instructions*. Abstract submitted to the 46th annual meeting of the Society for Philosophy and Psychology, Princeton, NJ.

Begus^a, K. & **Bonawitz**, E. (2020). Not all information is created equal. Investigating infants' sensitivity to confounded information in a causal reasoning task. Talk to be presented in symposium, titled *The origin of causal thought*. (organised by J. Kominsky), at the International Congress for Infant Studies (ICIS), Glasgow, UK.

Choi^a, K., Grados^a, M., & **Bonawitz**, E. (2020). *Child-led play supports adults' exploratory causal inferences*. Talk as part of the symposium, Parent-Child Interactions During Digital and Physical Playful Learning. *Society for Research in Child Development 2020 Special Topics Meeting: Learning Through Play and Imagination*. St. Louis, MO.

Macias^a, C., Shaban^a, F., **Bonawitz**, E. & Choi, K. (October, 2019). *The Effect of Socioeconomic Status on Young Children's Perceptions About Media Devices*. Pre-Conference Workshop on Digital Media and Cognitive Development poster session presented at the *Biannual Cognitive Development Society Conference*, Louisville, KY.

Macias^a, C., & **Bonawitz**, E. (October, 2019). *The Strategic Taxation of Working Memory: Preschoolers Attend to Belief-violating Information at the Cost of Encoding Future, Unrelated Information*. Poster session presented at the *Biannual Cognitive Development Society Conference*, Louisville, KY.

Choi^a, K., Grados^a, M., & **Bonawitz**, E. (2019). Learning from children: Adults' exploratory causal inferences benefit from observing child-led explorations. Poster accepted at the biennial meeting of the Cognitive Development Society, Louisville, KY.

Bass^a, I., Shafto, P., & **Bonawitz**, E. (2019). *Expectations about teaching styles shape inferences and exploration*. Poster to be presented at the *11th Biennial Meeting of the Cognitive Development Society*. Louisville, KY.

Colantonio^a, J., Walden^a, Z., Dehrone^a, T., & **Bonawitz**, E. (2019, Upcoming October). *When Innovators Succeed: Empowerment Strategies Increase Preschoolers' Exploration*. Poster to be presented at the *11th Biennial Meeting of the Cognitive Development Society*, Louisville, KY.

Persaud^a, K., Macias^a, C., Hemmer, P., & **Bonawitz**, E. (2019). Group Differences in the Influence of Category Expectations on Episodic Memory in Early Childhood. Poster to be presented at the *60th Annual Meeting of the Psychonomic Society*, Montreal, Quebec, Canada

Rett, A., **Bonawitz**, E., & Walker, C. (2019) When evidence alone is not enough: Facilitating the generation of unusual causal hypotheses. *Society for Philosophy and Psychology*. June, San Diego, CA.

Rett, A., Choi^a, K., **Bonawitz**, E., & Walker, C. (2019) “I Never Even Considered That!”: Investigating explanations for adults’ failures to learn conjunctive causal rules. *41st Annual Conference of the Cognitive Science Society*. Montreal, Canada.

Wang, J.J., & **Bonawitz**, E. (2019) Difficulty of numerical decisions guides adults’ active exploration. *Society for Philosophy and Psychology*. June, San Diego, CA.

Wang, J.J., Yang, Y., Macias, C., & **Bonawitz**, E. (2019). Children with Immature Intuitive Theories Seek Domain-Relevant Information. *41st Annual Conference of the Cognitive Science Society*. Montreal, Canada.

Bass^a, I., Hawthorne, D., Goodman, N., **Bonawitz**, E., & Gweon, H. (2019). The effects of information quality and informants' knowledge on evaluations of under-informative pedagogy. *Society for Research in Child Development*. Baltimore, MD.

Yang^a, Y., Wang*, J., Macias^a, M., & **Bonawitz**, E. (2019) Uncertainty in Preschoolers’ Intuitive Theories of Biology, Psychology, and Psychosomatic Events Drives Explanation Seeking. Symposium, “Explanation and Exploration in Children’s Intuitive and Scientific Theories”. *Presenting role. *Society for Research in Child Development*. Baltimore, MD.

Choi^a, K., & **Bonawitz**, E. (2019). Child-led play supports parents to make flexible and exploratory causal inferences. Symposium, "Pedagogies for curiosity and creativity: Children's learning during exploratory play". *Society for Research in Child Development*. Baltimore, MD.

Colantonio^a, J. & **Bonawitz**, E. (2019). Affecting play: Awe increases preschooler’s exploration and discovery. Symposium, "Information Gain as a Guide for Decision-Making in Early Exploratory Learning". *Society for Research in Child Development*. Baltimore, MD.

Walden^a, Z., Colantonio^a, J., Dehrone^a, T., & **Bonawitz**, E. (2019). When innovators succeed: Empowering tasks increase preschoolers exploration. *Society for Research in Child Development*. Baltimore, MD.

Choi^a, K., Lapidow^a, E., Austin, J., Shafto, P., & **Bonawitz**, E. (2019). Choosing whom and what to ask: Preschoolers' naturalistic question asking in a preschool setting. Symposium, "The darndest questions: The role of questioning in children's learning". *Society for Research in Child Development*. Baltimore, MD.

Bonawitz, E. (2018). Ambiguity, Expectation, and Information Gain in Early Childhood Exploration. In Symposium on Children's Exploration and Early Scientific Thinking. *APA Annual Convention*. San Francisco, CA.

Bass^a, L., Shafto, P., & **Bonawitz**, E. (2018) Expectations about Teaching Styles Shape Explore-Exploit Tradeoffs During Learning. *Cognitive Science Society* Preconference workshop on “Understanding Exploration-Exploitation Trade-offs”. Madison, WI

Choi^a, K., & **Bonawitz**, E. (2018). Adults can exploit children’s exploration for their own learning: Child-led play supports adult causal conjunctive inferences. *Cognitive Science Society* Preconference workshop on “Understanding Exploration-Exploitation Trade-offs”. Madison, WI

Colantonio^a, J., & **Bonawitz**, E. (2018) Affecting play: Awe increasing preschooler’s exploration and discovery. *Society for Philosophy and Psychology*. Ann Arbor, MI.

Lapidow^a, E. **Bonawitz**, E., Shafto, P., Austin, J., Choi^a, K., Tariq^a, S., & Bell^a, C. (2017) Preschooler’s are more likely to direct questions to adults than to other children (or selves) during spontaneous conversational acts. *Cognitive Development Society* Preconference workshop on “Question-Asking in Childhood: Development, Continuity and Constraints”, Portland, OR.

Yu^a, Y., **Bonawitz**, E., & Shafto, P. (2017) Pedagogical questions. *Cognitive Development Society* Preconference workshop on “Question-Asking in Childhood: Development, Continuity and Constraints”, Portland, OR.

Lapdiow^a, E., & **Bonawitz**, E. (2017) Preschooler’s Causal Hypothesis Testing Reveals Developmental Shifts in the use of Temporal and Pedagogical Information. *Child Development Society*, Portland, OR.

Macias^a, C., Persaud, K., Hemmer, P., & **Bonawitz**, E. (2017) Strategic memory: Preschoolers’ encoding of color categories. *Child Development Society*, Portland, OR.

Bass^a, L., **Bonawitz**, E., & Gweon, H. (2017) Didn’t know, or didn’t show? Preschoolers consider knowledge state and degree of omission when evaluating teachers. *Child Development Society*, Portland, OR.

Yu^a, Y., **Bonawitz**, E., & Shafto, P. (2017) Effects of adults’ scaffolding on young children’s strategic use of questions to solve a causal inference task. *Child Development Society*, Portland, OR.

Yu^a, Y., Landrum, A., **Bonawitz**, E. & Shafto, P. (2017, August). Questioning supports effective transmission of knowledge and increased exploratory learning. *The Annual Convention of American Psychological Association*. Washington, DC.

Lapidow^a, E., & **Bonawitz**, E., (2017) Rational Action: Ambiguity, Expectation, and Information Gain Influence Preschooler’s Choices in Exploration. *Society for Philosophy and Psychology (SPP)*, Baltimore, MD.

Bass^a, L., **Bonawitz**, E., & Gweon, H. (2017) Didn’t know, or didn’t show? Preschoolers consider epistemic state and degree of omission when evaluating teachers*. *Society for Philosophy and Psychology (SPP)*, Baltimore, MD. ***Honorable mention for best SPP poster prize.**

Bonawitz, E., Bass*, L., Shafto, P., Ramarajan^a, D., Gopnik, A., & Wellman, H. (2017) I know what you need to know: Children’s developing theory of mind and pedagogical

evidence selection. *Society for Philosophy and Psychology (SPP)*, Baltimore, MD. *Presenter and first author

Yu^a, Y., Landrum, A., **Bonawitz**, E., & Shafto, P. (2017) Questioning supports effective transmission of knowledge and increased exploratory learning in pre-kindergarten children. *Society for Philosophy and Psychology (SPP)*, Baltimore, MD.

Colantonio^a, J., Durkin^a, K., **Bonawitz**, E., & Shafto, P. (2017). Explaining Choice Behavior: The Intentional Selection Assumption. *Society for Philosophy and Psychology (SPP)*, Baltimore, MD.

Lapidow^a, E., & **Bonawitz**, E., (2017) Models of rational decision-making: Ambiguity, expectation, and information gain influence preschooler's choices in exploration-exploitation tasks. . Symposium on "Formal models of the development of learning and decision-making." *Society for Research in Child Development Biennial Meeting*. Austin, TX.

Doan^a, T., Castro^a, A., **Bonawitz**, E., & Denison, S. (2017) *This puzzle is hard! Difficulty of one task affects children's exploration on a second task*. Symposium on "The answer is out there: How do children find solutions to difficult problems?" *Society for Research in Child Development Biennial Meeting*. Austin, TX.

Blacker^a, K.A., Colantonio^a, J., LoBue, V. & **Bonawitz**, E. (2017) *Reasoning about the process of illness transmission improves preschooler's later avoidance of sick individuals*. Symposium on "The answer is out there: How do children find solutions to difficult problems?" *Society for Research in Child Development Biennial Meeting*. Austin, TX.

Shafto, P., **Bonawitz**, E., Landrum, A., & Yu^a, Y. (2016) Questioning supports effective transmission of knowledge and increased exploratory learning in pre-kindergarten children. *International Conference on Thinking*. Providence, RI.

Lapidow^a E., & **Bonawitz**, E. (2016) Heuristics in Exploration: Distributional information is selectively used for active learning. *49th Annual Meeting of the Society for Mathematical Psychology*. New Brunswick, NJ.

Lapidow^a E., & **Bonawitz**, E. (2016) Preschoolers evaluate risk and reward in exploration-exploitation tasks. *Proceedings of the 38th Annual Conference of the Cognitive Science Society*. Philadelphia, PA: Cognitive Science Society.

Lapidow^a E., & **Bonawitz**, E. (2016) Heuristics in exploration: Distributional information is selectively used for active learning. *Proceedings of the 38th 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*

Gualtieri, S., **Bonawitz**, E., & Denison, S. (2015). Do infants compare ratios or use simpler heuristics in probabilistic inference? *37th Meeting of the Cognitive Science Society*. Pasadena CA.

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., Denison, S., Gopnik, A., & Griffiths, T. (2011) Exploring the "Sampling Hypothesis" in preschooler's causal inferences. *Cognitive Development Society*.

Bonawitz, E., 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., 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. <http://cocosci.berkeley.edu/Liz/CogDevHandout.doc>

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

Lecturer - Harvard University (*new/revised course prep)

Curiosity in Learning and Development, Masters level (*FA2023, FA2024, FA2025)

How People Learn, Masters Core Course, Lecturer, and co-chair (2023-current)

PSY 910r, Psychology Supervised Research Lab Course (PSY, FA2023, FA2024, SP2025)

Behavioral Methods in Developmental Learning Research, Graduate level (*SP2022; SP 2023)

S999 Independent Study for HGSE Masters Students (FA 2021; SP 2022; FA2022; SP2025)

*Curiosity and Creativity in Learning and Development, Masters level (FA2021)

*HDLT Core Course, Graduate level (SP2021)

Lecturer - Rutgers University (**new/revised course prep*)

Cognitive Processes, Graduate level (Rutgers, *FA2015; SP2019)

Cognitive Processes, Undergraduate “Introduction to Cognitive Science” (Rutgers, SP2015; Hybrid Course: SP2017; FA2018; *FA2019)

*Rutgers Undergraduate Honors Living Learning Community Course, “Uncertainty and Learning: Drawing Inferences from Ambiguous Data” (Rutgers, SP2018)

Psychology Graduate Seminar Select Topics in Human Learning, “Computational Models of Development and Learning” (Rutgers, FA2020, *FA2017)

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

Lab PI – Internship Research Director (HGSE)

S997 Research Internship in Bonawitz Harvard Lab (SP 2022, FA2023; SP2024; FA2024; SP2025)

Seminar organizer – Rutgers University

Cognitive Processes Seminar (“CBB”) (Rutgers, SP2015; FA2015; SP2016; FA2016; SP2017 – co-occurring with Research Seminar; FA2017; SP2018; FA2018; SP2019; FA2019)

Research Seminar, Graduate level (Rutgers, SP2017 – co-occurring with CBB)

Bits & Bytes: Machine Learning Seminar (Rutgers, FA2015-SP2017; SU2018; FA2018; SP2019; FA2019)

Lab PI Rutgers – Research supervisor for students

Research in Psychology (Rutgers, All semesters 2014-current)

Senior Thesis (Rutgers, All semesters 2014-2020)

Teaching Assistant

Infant and Childhood Cognition (MIT, FA2005); *Angus MacDonald Award for Excellence in Undergraduate Teaching*

Infant and Childhood Cognition (MIT, FA2006); *Walle Nauta Award for Continuing Dedication to Teaching*

Brain and Cognitive Sciences II for Graduate Students (MIT, SP2008)

Invited Guest Lecturer

University students:

Harvard Psychology, PhD Cognitive Development ProSem. Faculty lead (lecture, qualifying exam grader) on topic Computational Models of Cognitive Development (FA 2024)

University of California, Berkeley. Developmental proseminar. (SP 2022)

University of California, San Diego Graduate Seminar: “Learning by Thinking” (SP 2021)

Harvard Graduate School of Education Doctoral Colloquium Speaker (HGSE, SP 2021)

Mind, Brain, and Education Seminar (HGSE Mind, Brain, & Education, SP 2021)

Honor College Freshman Colloquium (Rutgers – Newark, FA2017)

Cognition, Emotion, and Personality. Doctoral course in clinical psychology at the Wright Institute. (SP2012)

BROCA, Berkeley Review of Cognitive Science Articles (Berkeley, FA2010)

Topical Seminar in Developmental Psychology (Berkeley, FA2009)

Basic Issues in Cognition (Berkeley, FA2009)

Cognitive Development (MIT, F2007; FA2008)

Introduction to Child Psychology (MIT Freshman Pre-orientation Program; FA2008)

Community based educational talks:

Concord Carlisle School District AI in Education Workgroup. (April, 2025)

Education Now: Curiosity and Motivation Amid the Pandemic. Harvard Graduate School of Education. Online Webinar: <https://www.youtube.com/watch?v=kcfBgOWXBv4> (December, 2020)

Newark Museum Maker Fest (09/18) Newark Museum, Newark NJ.

Preschool Night at the Museum (06/18; 06/19) Newark Museum, Newark NJ.

North Star Academy lab tour and STEM presentation (04/17) RU-N, Newark, NJ.

The child as a scientist: How children change their minds. (04/12) Menlo-Atherton Coop Nursery School speaker series. Menlo Park, CA.

Life Cycle Adult Workshop: Science of Kids (02/08) *The Rational Child: Reasons behind Kids' Quirky Behaviors*, Museum of Science, Boston MA.

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

Trainees Mentored

Post-doctoral fellows (16):

Ilona Bass
7/21 - present

Co-mentor - with Tomer Ullman, Harvard University Psychology.
Recipient of the Mind, Brain, and Behavior Postdoctoral Fellowship Award (2021-2023); NSF postdoctoral fellowship (2023-2025)
Recipient of the NSF postdoctoral Fellowship Award (2 years)

Joseph Colantonio 8/1/23 – present	Sole Mentor.
Junyi Chu 1/1/23 – 8/24	Co-mentor - with Tomer Ullman (Harvard Psychology) Received Harvard Ditmers Innovation Funds Award (1 year), “Understanding Play and Imagination in Early Childhood.” Total Award: \$35,000
Rosie Aboody 9/1/22 - 8/24	Co-mentor - with Laura Schulz (MIT), Tomer Ullman, Harvard University Psychology. Recipient of the NSF postdoctoral Fellowship Award (2 years) Total Award: \$138,000 (\$54,000 salary, \$15,000 research for 2 years) Hired as a Data Analyst Meta
Jonathan Kominsky 08/19 – 8/22	Sole Mentor. Recipient of Templeton Postdoctoral Fellowship (2021) TT R1 Faculty at Central European University.
Igor Bascandziev 7/19 – present	Sole Mentor. Received Caplan Foundation Grant (2022) Co-PI on NSF 1.5 M Award
Katarina Begus 03/19 – 6/22	Sole Mentor. TT R1 Assistant Professor, University of Copenhagen.
Jenny Wang 09/18 – 9/20	Sole Mentor. TT R1 Faculty position at Rutgers University – New Brunswick.
Koeun Choi 07/17-2018	Sole Mentor. TT R1 Faculty position at Virginia Tech Fall 2018
Kimele Persaud 09/18 – 12/21	Sole Mentor. Received NSF post-doctoral fellowship. TT R1 Faculty Position at Rutgers University – Newark, SP 2022.
Emily Daubert 09/18 – 8/19	Bonawitz Primary; Co-mentored with Patrick Shafto. TT Faculty Position at University of Hawaii Fall 2019.
Lauren Leotti 9/18 – 12/21	Co-mentored with Vanessa LoBue. Project Manager with LoBue at Rutgers.
Yang Yang 06/17-2018	Sole Mentor. TT R1 Faculty position National Institute of Ed. Singapore FA 2018
Libby Barak 07/18 – 6/20	Co-mentored with Patrick Shafto (primary). TT Faculty position at Montclair State University, Linguistics.
Yue Yu 06/15-2018	Co-mentored with Patrick Shafto. TT R1 Faculty position National Institute of Ed. Singapore FA 2018
Lewis Baker 06/16-06/17	Co-mentored with Patrick Shafto and Vanessa LoBue. Hired into Data Science tech industry position.

Graduate students (6):

Blerim Jashari 8/25 - present	(Incoming graduate student HGSE)
Maya Komakhidze 8/24 - present	MBB Graduate Research Stipend (2025)
Michelle Wong 9/22-present	NSF Graduate Research Fellowship Program (2024-2027) Graduate Society Summer Pre dissertation Fellowship (2023)
Joseph Colantonio 06/18-08/23	NIH Minority Biomedical Research Support Program Fellow (2018-2020); Received NSF GRF Honorable mention 2020; Dissertation Graduate Fellowship (2022-2023)
Carla Macias 08/16-6/22	Received Rutgers University Dissertation Award (2021-2022). Awarded the NSF GRF (2018-current). NIH Minority Biomedical Research Support Program Fellow (2016-2018)
Ilona Bass 08/16-6/21	Received AAUW Dissertation Awards (2020-2021); Received NSF GRF Honorable mention 2018; Rutgers University – Newark Dissertation Award 2020-2021

Doctoral dissertation committees (14):

Harvard University (Nonmentored students) (1)
Kenji Kitamura (2024-present)

Rutgers University (5):

Katy-Ann Blacker (Defended 2016)	Jessica Benson (Defended 2017)
Catherine Cho (Defended 2017)	Shahram Peyvandi (Defended 2017)
Brynne Dimenichi (Defended 2018).	

Other Universities (9):

Anselm Rothe - NYU (May 2019)	Carolyn Bear - UBC (May 2020)
Danbee Kim - Champalimaud (2020)	Carolyn Gaudreau - U. Delaware (2020-2021)
Natalie Evans - Temple U (2021)	Zhiwei Li - NYU (2021)
Bill Liang – UMass, Boston (2022-2024)	Balint Varga - CEU (2024-2025)
Esra Kucuk - Boston U. (2025-2026)	

NIH Minority Biomedical Research Support Program Rutgers Undergraduates (4):

Amanda Castro (2014-2015), Joseph Colantonio (2015-2016 Undergrad; 2016-2018 post-bac); Anishka Jean (2017 – 2019); Milagros Grados (PREP program 2018 – 2020)

Lab Technicians mentored at Harvard (5):

Elise Mahaffey (8/19–8/22)	Jiayi Wang (6/22–8/24)
Iris Jefferies (9/23 – 8/24)	Carole Zhou (6/23–6/24)
Isminur Yilar (6/24–present)	

Lab Technicians mentored at Rutgers (12):

Elise Mahaffey (8/2019-8/2022)	Jesse Hilario (05/19- 9/19)
Najira Ahmed (05/19-9/19)	Raquel Queiruga (5/19-7/19)
Cheta Patel (7/19-9/19)	Zachary Walden (09/16–04/19)
Jack Fredricks (02/17–2019)	Milagros Grados (06/18 – 2020)
Elizabeth Lapidow (01/15-08/17)	Leyla Caglar, (09/13–08/15)
Samantha Kinsley (06/14-06/15)	Sophie Bridgers (06/12 – 08/14)

HGSE Masters Students (59): Internship¹, Independent Study², & Research Training/S997

Nicholas McNab ² (6/21-5/23)	Krisztina Mathe ¹² (9/21-5/22)
Xiao Feng ² (9/21 – 5/22)	David Gertz (1/22-7/22)
Pawan Gupta ¹ (1/22-6/22)	Rachel Parker ¹ (1/22-7/22)
Tatian Schafer ¹ (1/22-6/23)	Ruben Cruz Valladares ¹ (1/26-5/22)
Christian Espinoza (1/22-present)	Jaeyeon (Jenny) Hwang (1/22-3/24)
Sara Zaghlul ² (3/21-2023)	Zumin Chen ¹ (9/22 – 8/23)
Yutong Gao (1/23 – 5/23)	Mu-Yin Chang (1/23 – 5/23)
Jenny Wolfe (1/23 – 5/23)	Adrian Medina (1/23 – 5/23)
Yishu Li (1/23 – 5/23)	Calla Kennedy (1/23 – 5/23)
Carole Zhou (9/22 – 6/24)	Yichen Wang (9/22 – 5/23)
Yifei Pei (1/23 – 5/23)	Carina D’Urso (1/23- 5/23)
Jessica Lin (1/23 – 5/23)	Wenting Zhu (9/22 – 5/23)
Feifei Shen (1/23 – 5/23)	Sarah Kang (1/23 – 5/23)
Yumeng Zhang (1/24 – 5/24)	Kancong (Silvia) Liu (9/23-present)
Yihan Shi (9/23-5/24)	Alessia Cuntungno ((9/23-5/24)
Tayna Buchara Camargo ((9/23-5/24)	Paula Cruz Pereira (9/23-12/23)
Tieri Rigamoto (9/23-5/24)	Evelyn Li (9/23-12/23)
Damla Yesil (9/23-1/24)	Yiran Du (9/23-12/23)
Wenzu (Cecilia) Wang (9/23-1/24)	Nadia Aikebaier (9/23-12/23)
Sarah Paige Bost (9/23-12/24)	Jazlyn Navarro Jimenez (9/23-present)
Isminur Yilar (1/24-present)	Sanghee Song (1/24 – 5/24)
Jiayi Song (9/24-1/25)	Yujung Ro (9/24-12/24)
Cecilia Zhou (9/24-1/25)	Jeeya Patel (5/24-present)
Jenna Weinhofer (9/24-1/25)	Yuhan Shi (9/24-5/25)
Hedy Chiuhiye Chen (9/24-5/25)	Anna Taylor (9/24-5/25)
Zihao Zhou (1/24-present)	Joel Paulin Mendoza (9/24-5/25)
Nam Nguyen (9/24-present)	Olivia Yan (9/24-5/25)
Han Seth Lu (9/24-1/25)	Yimeng Sun (2/25-5/25)
Nadia Wang (2/25-5/25)	Mansoor Azizi (2/25-5/25)
Blerim Jashari ² (2/25-5/25)	

External student interns mentored at Harvard (20)

Michael Sheehan (1/24- 5/24)	Katie Fourie (1/24 – 5/24)
Verity Pinter (1/24 – 5/24)	Roland Barkans (1/24 – 5/24)
Yemlin Lee (1/24 – 5/24)	Assyl Zhanuzak (1/24 – 5/24)
Amal Kashif Sabeeh (1/24 – 5/24)	Sarah Paige Bost (1/24 – 5/24)
Duy Vu (1/24 – 5/24)	Amina Mohamed (1/24 – 5/24)
Darryl Ku (1/24 – 5/24)	Julio de Oliveira Caggiano Buonomo (9/23-present)
Misha O’Koffee (1/23-present)	Nina Baroin (8/24-present)

Sitera Datwani (8/24-present)
 Uliana Zavalova (9/24-5/25)
 Zara Skolnik (6/25-present)

Shameen Kashif (9/24-5/25)
 Alexandre Lucas (8/24-present)
 Noanddi Manigat (6/25-present)

Masters Theses: Harvard Extension School¹, External²

Eugene Lee¹ (2022-2024)

Adani Abutto² (8/22 – 08/23)

Harvard Undergraduate Theses

Angela Dela Cruz (2023 – 2024)

Undergraduate Research Assistants at Rutgers University

2014-2022 (126); **Honors Thesis (14)**; ¹Supervised primarily by graduate students, post-docs

Raquel Damaghi

Samantha Kinsley

Amanda Castro

Sadie Logozio

Renu Mahagaonkar

Trisha Dehrone

Hira Abbacy¹

Reham Bader¹

Naa Adei Kote¹

Yossy Montecinos¹

Courtney Bell¹

Shirley Abbleard¹

Prubjot Kaur¹

Anmol Champaneria¹

Cierra Clark¹

Jazmin Carchi¹

Andrea Antunes¹

Sydney Dockery¹

Cheta Patel¹

Jennifer Strong¹

Hetshri Patel¹

Umradha Shievkumar¹

Katia Rodriquez¹

Melissa Saenz¹

Yossy Montecinos¹

Gabrielle Vicente¹

Briana Ali¹

Jae Yi Ko¹

Kamaria Kaalund¹

Rebeca Avalos¹

Nadia Barouk¹

Giovanna Bialoglowka¹

Lucia Amaris¹

Jahni Reaves¹

Haneen Daas¹

Michael LaSorsa¹

Janet Sayilik

Tahani Chaudhri

Richard Ortegon

Christopher Sakariasen

Patricia Palanca

Adam Yen

Iqra Azam¹

Natasha Patel¹

Leeza Camilo¹

Milagros Grados¹

Anishka Jean

Fatima Shaban¹

Kassandra Rodriguez¹

Priscilla Mejia¹

Mary Manansala¹

Akshana Sridharan¹

Jesse Hilario¹

Ann Shokry¹

Aiyana Bedoya¹

Vaishnavi Seshadri¹

Chika Ezeiruaku¹

Joanner Santana¹

Evelyn Shokry¹

Yusteena Shehata¹

Srita Chintapalli¹

Navjot Dhaliwa¹

Aishah Shabazz¹

Cyndie Casseus¹

Alexandra Filiault¹

Valentina Castrillon¹

Nicole Graham¹

Sandra Youseff¹

Marissa Rangel¹

Serena La¹

Ann Darrosa¹

Mariam Habib¹

Kristina Roose

Samantha Smith

Itzel Santana-Miranda

Jack Fredricks

Joseph Colantonio

Victoria Golinski¹

Sara Tariq¹

Ethan Motschmann¹

Rosa Lasso¹

Merna Seddik¹

Parthenia Bogdady¹

Bassem Rezkalla¹

Jillian Brandmier¹

Kiabeth Guazhco¹

Humza Alvi¹

Vanessa Obregon¹

Laura Torres¹

Avneet Samra¹

Jocelyn Rea¹

Micha Connolly¹

Fathima Hussain¹

William Mahoney¹

Jocelyn Rea¹

Umradha Shievkumar¹

Katherine Archer¹

Abhirami Elayidom¹

Puja Patel¹

Mariam Abdelmoula¹

Anekha Goyal¹

Arrisa Morris¹

Micaela Generali¹

Marina Hanna¹

Maria Hanna¹

Mary Mousa¹

Ericka Zapet¹

Hager Elessawy¹

Daniel Reardon ¹	Saideeka Jones ¹	Taisha Blanc ¹
Diksha Patel ¹	Sebastian Nazal ¹	Ayanna Johnson ¹
Sugandhi Yerram Reddy ¹	Christine Khalil ¹	Chelsea Tidd ¹
Esteban Cabrera ¹	Ludeline Jean ¹	Aryanah Solano ¹
Kelvin Sorto ¹	Vidhi Patel ¹	Susanna Falls ¹
Mary Grace Morales ¹	Serena La ¹	Priscilla Gomez-Acevedo ¹

High school Outreach mentees¹:

2015-2016	North Star Academy: Viannis Almonte, Mariyam Kayjay
2016-2017	North Star Academy: Angeline Logan, Mercy Olajobi
2017, 2019	Summer Lab Interns: La'v'al Davis, Abhirami Elayidom
2023	Dalina Cao

Professional Activities & Service

Grant Advisory Boards

Active (funded only):

MAGIC: (Measuring Acquisition & Growth of Inquiry & Curiosity). PI Jelena Obradovic. Bill and Melinda Gates Foundation and the Walton Family Foundation. (2024-2027)

CAREER: Leveraging neuroscience to predict and improve science learning in early elementary school. PI. Allyson Mackey (2021-2026)

CAREER: How Many Intuitive Physics Systems are There, and What Do They Mean for Physics Education. PI. Joshua Hartshorne (2023-2028)

Algorithmic Foundations of Mathematical Knowledge. PI. Steve Piantadosi. NSF, DRL. (2022-2027)

Completed:

Using computational models to understand the dynamical organization of brain structure. PI Sam Gershman. NSF (2022)

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

CAREER: The social representation of the physical world. PI Julian Jara-Ettinger. NSF (2021-2024)

Reviewing

Associate Editor: *Open Mind* (2023 - present); *Cognitive Science* (2018 – 2021)

Editorial Board: *Journal of Cognition and Development* (2021-2023)

Journals (ad hoc): *Nature Human Behavior*, *Cognition*, *Cognitive Science*, *Child Development*, *Developmental Psychology*, *Cognitive Psychology*, *Developmental Science*, *British Journal of*

Development, Journal of Experimental Psychology: Learning, Memory and Cognition, Quarterly Journal of Experimental Psychology, PLoS ONE, Open Mind

Professional Societies (ad hoc): *Society for Research in Child Development, Annual Conference of the Cognitive Science Society, Society for Philosophy and Psychology, International Conference of Development and Learning,*

Cognitive Science Society Program Committee Member (2019-current)

Granting organizations (ad hoc): *NSF, NIH, NOW*

Panel Grant Reviewing: NSF 2018; NSF 2022

Reviewing award committee (2021): *APA Division 7 Eleanor Maccoby Book Award in Developmental Psychology*

Membership in Scientific and Professional Societies

Board of Directors: Cognitive Development Society (2019 – term end SP 2026)

Coordinated the 2023-2024; 2025-2026 CDS mentorship program, with ~ 200 participants each year.

American Education Research Association, Society for Research in Child Development, Cognitive Science Society, Eastern Psychological Association, Society for Philosophy and Psychology, American Psychological Society, American Association for the Advancement of Science, Society for the Improvement of Psychological Science, Women in Cognitive Science

Organizing Conferences, Symposia, & Workshops

Conference Co-organizer: *Computational Cognitive Models of Learning & Development*. (2023). Harvard University. Co-organized with Tomer Ullman, Kimele Persaud.

Conference Co-organizer: *Newark Play Conference*. (2019) Rutgers University – Newark. Co-organized with Patrick Shafto.

Workshop Co-organizer: *Understanding ExplorationExploitation Tradeoffs*. (2018) 40th Annual Cognitive Science Society Workshop. Co-organized with Alison Gopnik and Celeste Kidd. Madison, WI. July, 2018.

Workshop Co-organizer: Guiding Guided Play. (2018) Workshop on the NSF Science of Learning Guided Play initiative. Newark, NJ. Co-organized with Patrick Shafto. June, 2018.

Workshop Organizer: *Active Learning: Cognitive Development, education, and computational models*. (2016). *Cognitive Science Society Workshop*. Philadelphia, PA.

Workshop 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 Workshop 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. (2013).

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

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

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

Campus-Based Service

Harvard University and HGSE Service

Faculty Search Committee: Assistant Professor of Human Development (5/24 – 2025)

HPL (“How People Learn”) Co-chair (2023-present)

AI and Education Workgroup (Fall 2023, Fall 2024-Spring 2025)

Invited contributor (video interview) AI Literacy Tutorial for HGSE Masters Program (2025)

Harvard Psychology Affiliate Rep for Departmental Visiting Committee Meeting (2025)

Faculty Search Committee: AI and Education (2023-2024)

Harvard Psychology Faculty Affiliate (2024 – present)

Invited Speaker at Dean’s Leadership Council (DLC) (Fall 2023)

HDE Core Faculty Advisor (2022-2023; 2025-2026)

LDIT Core Faculty (2021-2022)

Invited Representative for HGSE Doner Meeting “Teachers in the Tech Space” (2023)

HGSE Ed.M. Admissions Committee (2021, 2022, 2023)

PPREP Mentor: Support historically marginalized students as they pursue higher education and experience in psychology (FA 2021)

Harvard Psychology Board of Honors Tutors (2022-present)

University Service Rutgers University - Newark

Invited speaker at Dean’s Cabinet Meeting (June, 2019).

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.

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

Master of Science in Data Science Program Committee (Fall 2015 – Fall 2016)

Participation in North Star Academy Mentorship Program (2015-2016; 2016-2017)

Lab participation in Rutgers Day (SP2014, SP2015, SP2016, SP2017, SP2018)

Departmental Service Rutgers University - Newark

Psychology BA-MA Program Committee Chair (Fall 2015- SP2020)

Travel Award Committee (Chair), (Spring 2017-present)

MA development committee (SP2015)

Rutgers Psychology Website Committee, (2014–2017)

Distinguished Teaching Award committee (Summer 2014, Spring 2016)

Qualifying Exam Committee (2014, 2017, 2019)

Additional service: Co-wrote Psychology Department Strategic Initiatives Activities Report (SP2015); Faculty Departmental Commencement Attendance (SP2015); Planning committee on UG methods, statistics courses.

Community outreach & collaborations

Co-lead on the **Parent Researcher Collaborative (PARK)**. PARK includes six faculty members from different universities in the US that **Founded Children Helping Science**. Children Helping Science is the collaborative website that supports over 1300 researchers from 262 labs (over 176 institutions) across the world in the developmental sciences, facilitating online research through a network of more than 15000 families.

Consultant on HP “Printables” Campaign (Launched Summer 2025):

<https://printables.hp.com/us/en/partner/highlights-for-children>

Fostered a research collaborative with the Newark Museum, to house an onsite Mobile Maker Center as part of a lab outreach and testing initiative (Co-PIs Vanessa LoBue, Patrick Shafto)

Newark: Teacher and parent outreach at 23 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)

Media Coverage

Online Panels and PodCasts:

Invited expert on “Science to the People” Podcast “Born Curious: How Kids Build Theories About the World”:

<https://sciencetopeople.substack.com/p/born-curious-how-kids-build-theories> (2025)

Invited expert on “STEM Podcast with Ehsan Adouane” Podcast “Insights from Harvard Cognitive Development Expert - Prof Elizabeth Bonawitz”

<https://www.youtube.com/watch?v=dO5mZGq57cw> (2025)

Invited expert on Epistimones Podcast: #21 “How children learn about the world”

<https://anchor.fm/epistimones/episodes/21--Elizabeth-Bonawitz-How-children-learn-about-the-world-e1i5kp6> (2022)

Invited expert on “In Lieu of Fun” Episode 391: Elizabeth Bonawitz on Developmental Cog Psychology <https://www.youtube.com/watch?v=FQIYC-hUTqg> (2021)

Television & Film:

Apple TV - (Program title held confidential until release). Science Consultant (2022-2023)

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

In the news (selected):

Usable Knowledge “[Thought Experiments Can Enhance Science Learning](#)”. August, 2025.

The Everymom “[How one small change made family dinner our favorite part of the day](#)”. July 2025. (Quoted and featuring my collaboration with HP/Highlights on the Printables Campaign)

National Enquirer “[HP and Highlights Magazine Team Up for ‘Bite Sized Lessons’ to Combat Summer Learning Loss](#)”. July 2025. (Quoted and featuring my collaboration with HP/Highlights on the Printables Campaign)

Brandpoint Content “[Fun new ways to keep kids academically engaged all summer](#)”. July 2025. (Quoted and featuring my collaboration with HP/Highlights on the Printables Campaign)

Harvard GSE News “[How to foster curiosity in children](#)”. December 2025. (Video interview.)

The Atlantic. “[A Paradigm Shift in How Scientists Study Kids](#)”. February 2024. (Quoted and my work on Children Helping Science featured as core of article.)

Usable Knowledge. “[Why do children play?](#)” September 2023. Also run in Harvard Gazette.

Psyche. “[This is how to nurture curiosity in children \(and yourself\)](#)”. August 2023.

Ed. Harvard Ed Magazine. “[Is It Better to Ask Questions or Listen Carefully?](#)” (December, 2022)

Rutgers Today. “[Just Enough Information Will Motivate Young Children to Learn, Drive Curiosity.](#)” (June, 2021)

Ed. Harvard Ed Magazine. “[My Get Up and Go Got Up and Went](#)”. (Spring, 2021)

Usable Knowledge: Relevant research for today’s educators. “[A Curious Mind](#)”. (Nov 2020)

BOLD (Blog on Learning and Development) – [Play during pandemics? Preschoolers learn about germs.](#) Interview with Bonawitz (April 2020)

Rutgers Today [Making Playtime Count as COVID-19 Shapes the Summer.](#) (July 2020)

NJMOM *How your Baby Can Be a Science Trailblazer.* (February 2020)

BOLD (Blog on Learning and Development) - *All children can greatly benefit from guided play* (April 2019)

Child and Family Blog – *A New Idea For Early Learning in Preschoolers: Inspire Them With Awe* (July 2019)

Brains On! American Public Media – *What makes fun things fun.* Invited guest scientist for episode. (August 2018)

Rutgers University News – *Faculty Trio Explores Children’s Learning With Mobile Maker Center* (April 2018)

NPR.Org -- *When Children Begin To Lie, There's Actually A Positive Takeaway* (Sep 2017)

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