

# Madeline Pelz

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## EDUCATION

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- 2016-2021 **Massachusetts Institute of Technology**, Cambridge, MA  
Ph.D. in Brain and Cognitive Science (Developmental Cognition)
- 2010-2014 **Skidmore College**, Saratoga Springs, NY  
B.A. in Neuroscience, *summa cum laude*

## RESEARCH EXPERIENCE

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- 2021-PRESENT **Postdoctoral Researcher**  
Psychology Department  
Wesleyan University (Middletown, CT), PI: Anna Shusterman
- 2016-2021 **Ph.D. in Brain and Cognitive Science (Developmental Cognition)**  
Department of Brain & Cognitive Sciences  
Massachusetts Institute of Technology (Cambridge, MA), PI: Laura Schulz
- 2014-2016 **Lab Manager & Programmer**, Rochester Baby & Kid Lab  
Department of Brain & Cognitive Sciences  
University of Rochester (Rochester, NY), PI: Celeste Kidd
- 2013-2014 **Senior Honors Thesis**, Neuroscience Program  
“The role of serotonergic signaling in the anticonvulsant properties of cannabidiol”  
Skidmore College (Saratoga Springs, NY), PI: Hassan H. López
- SPR. 2014 **Research Assistant**, Cognitive Neuroscience  
Skidmore College (Saratoga Springs, NY), PI: Flip Phillips
- SUM. 2013 **Research Assistant**, Leadership Alliance  
Summer Research Early Identification Program  
University of Pennsylvania (Philadelphia, PA), PI: Douglas Coulter
- SPR. 2012 & 2013 **Research Assistant**, Behavioral Neuroscience  
Skidmore College (Saratoga Springs, NY), PI: Hassan H. López
- SUM. 2012 **Undergraduate Research Fellow**  
American Society for Pharmacology & Experimental Therapeutics  
University of Michigan (Ann Arbor, MI), PI: Richard Neubig
- SUM. 2011 **Research Assistant & Bender Mentor**, Neuroscience Program  
Skidmore College (Saratoga Springs, NY), PI: Denise McQuade
- SUM. 2009 & 2010 **Research Assistant**, Rochester Baby Lab  
Department of Brain & Cognitive Sciences  
University of Rochester (Rochester, NY), PI: Richard N. Aslin

## TEACHING & MENTORSHIP

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- 2017-PRESENT **Undergraduate Research Opportunity Program (UROP) Mentor**
- SUM. 2018 & 2020 **MIT Summer Research Program (MSRP) Mentor**
- SPR. 2019 & 2020 **Teaching Assistant**, Introduction to Psychological Science
- FALL 2017 & 2018 **Teaching Assistant**, Infant & Childhood Cognition
- 2014 **Head Teaching Assistant**, Intro to Neuroscience
- 2013 **Teaching Assistant**, Intro to Neuroscience
- 2012-2014 **Peer Tutor**  
Intro to Neuroscience, Statistics for Psychology, & Cognitive Neuroscience

## HONORS & AWARDS

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- 2019 Brain and Cognitive Sciences Nominee for Goodwin Medal in Graduate Teaching, MIT  
2019 Walle Nauta Award for Continued Dedication to Teaching, MIT  
2018 Angus MacDonald Award for Excellence in Undergraduate Teaching, MIT  
2016-PRESENT NSF Graduate Research Fellowship  
2014 Phi Beta Kappa  
2014 Marjorie Keenoy '44 Academic Scholarship in the Sciences, Skidmore College  
2010-2014 Porter Presidential Scholarship in Science and Mathematics, Skidmore College  
2014 Student Opportunity Funds Award, Skidmore College  
2011 Bender Mentor, Community Foundation for the Greater Capital Region

## PUBLICATIONS & PRESENTATIONS

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- Pelz, M.**, Allen, K., Tenenbaum, J.B., & Schulz, L.E. (*Under Review*). Foundations of Intuitive Power Analyses in Children and Adults. *Nature Human Behavior*.
- Pelz, M.**, Schulz, L., & Jara-Ettinger, J. (*in prep*). The Signature of All Things: Children Infer Knowledge States from Static Images.
- Kominsky, J.F., Gerstenberg, T., **Pelz, M.**, Sheskind, M., singmann, H., Schulz, L., & Keil, F.C. (2021). The trajectory of counterfactual simulation in development. *Developmental Psychology*.
- Siegel, M.H., Magid, R.W., **Pelz, M.**, Tenenbaum, J.B., & Schulz, L.E. (2020). Intuitive psychophysics? Children's exploratory play tracks the discriminability of hypotheses. *Nature Communications*.
- Pelz, M.** & Kidd, C. (2020). The elaboration of exploratory play. *Philosophical Transactions of the Royal Society B*.
- Pelz, M.** & Schulz, L. (2018). Intuitive Statistics & Metacognition in Children and Adults, Cognitive Science Society Meeting, Madison, WI. (Presented as talk)
- Pelz, M.**, Schoolcraft, K., Larson, C., Spring, M., & López, H.H. (2017). Assessing the role of serotonergic receptors in cannabidiol's anticonvulsant efficacy. *Epilepsy & Behavior*, 73, 111-118.
- Pelz, M.** & Kidd, C. (2016). Switches in attention reflect a strategy for optimizing learning. Active Learning: Cognitive Development, Education, and Computational Models Workshop, Cognitive Science Society Meeting, Philadelphia, PA. (Presented as talk)
- Pelz, M.** & Kidd, C. (2016). Attentional Switching in Complex Environments. Attention and Learning in Infancy Symposium, International Conference on Infant Studies. (Presented as talk)
- Pelz, M.**, Piantadosi, S., Yung, A., & Kidd, C. (2015). Quantification and modeling of exploration in complex learning environments. Invited talk presented at More On Development Workshop, Cognitive Development Society Meeting, Columbus, OH.
- Pelz, M.**, Yung, A., & Kidd, C. (2015). Quantifying curiosity and exploratory play on touchscreen tablets. Proceedings of the IDC 2015 Workshop on Digital Assessment and Promotion of Children's Curiosity. (Presented as talk)
- Pelz, M.**, Piantadosi, S., & Kidd, C. (2015). The dynamics of idealized attention in complex learning environments. Proceedings of the Fifth Joint IEEE International Conference on Development, Learning, & Epigenetic Robotics. (Presented as poster)
- Minney, S., Bind, R, **Pelz, M.**, Rosenfeld, S, & López, H. (2014). Effects of adolescent estrogen and cannabinoid treatment on adult female socio-sexual behavior. Society for Neuroscience annual meeting, San Diego, CA. (Presented as poster)
- Kehrl, J., Sahaya, K., Dalton, H., Charbeneau, R.A., Kohut, K.T., Gilbert, K., **Pelz, M.**, Parent, J., & Neubig, R.R. (2014). Gain-of-function mutation in Gnao1: A murine model of epileptiform encephalopathy. *Mammalian Genome*, 25(5-6), 202-210.

**Pelz, M.,** Frausto, S., Kelly, M.E., & Coulter, D. (2013). Imaging and characterization of hippocampal circuits implicated in temporal lobe epilepsy. Talk presented at Leadership Alliance National Symposium, Stamford, CT.

## SERVICE

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- 2018-2021 Organizer of weekly R tutorials for staff and students, Psychology Department, Wesleyan University.
- 2018-2021 Graduate Community Fellow (Programs for Women), Office of Graduate Education, MIT  
Organized annual conference on careers in academia for graduate and postdoctoral women.
- 2017-2018 Organizer of weekly CogLunch lecture series in Brain and Cognitive Sciences department, MIT.
- 2014-PRESENT Reviewer for Behavior Research Methods, Cognitive Science, & Developmental Science.
  - 2018 Judge at Blueprint Hackathon for MA high school students.
- 2014-2016 Supervised and trained two high school students and eight undergraduate research assistants in the Rochester Baby & Kid Lab.
- 2014-2016 Volunteer at Rochester Museum & Science Center.

## TECHNICAL SKILLS

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R, Python, HTML, & Adobe Photoshop