Curriculum Vitae (December 2025)

Melody Slavnik-Xu

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EDUCATION

2023 – 2028 (exp) Ph.D., History of Science, Technology, and Medicine
Johns Hopkins University, Baltimore, MD
Advisor: Alison McManus

Dissertation: "Visualizing the Mind: Psychological Measurement and the Politics of Expertise in the 20th Century"

2014 – 2018 B.A., Individualized Major: History and Philosophy of Science, Psychology
Minor: Science and Society
New York University, New York, NY
Advisor: Matthew Stanley

Senior Thesis (received honors): "The History of A.I.: Simon and Newell's Physical Symbols Approach"
Advisor: Jonathan Bain

HONORS AND AWARDS

2025	Society for the History of Technology Conference Travel Grant
2025	Cheiron International Conference Travel Grant
2021-22	Fulbright Research Award Recipient, United Kingdom The A.I.-Child Metaphor in the History and Philosophy of Science
2020-21	Fulbright Research Award Recipient, China [Cancelled due to COVID] History of A.I.: Physical Symbols System in Beijing
2018	NYU Gallatin School Degree Representative
2018	Dean's Award for Graduating Seniors
2017-18	Gallatin Undergraduate Research Fund

RESEARCH INTERESTS

Developmental science, history of psychology, history of technology, 20th century American history

RESEARCH EXPERIENCE

Project Manager, PLAY Project (Playing and Learning Across a Year), New York Jan 2017 – Aug 2023
Principal Investigators: Karen Adolph, Catherine Tamis-Lemonda, Rick Gilmore

- Oversaw a collaborative and synergistic video-intensive developmental science research initiative examining mother-infant natural activity with 75 principal investigators from 50+ universities.
- Managed $6.3M budget through tracking expenditures, monitoring vendor contracts, and calculating spending forecasts.
- Spearheaded remote video training program to ensure data collection quality and consistency across 30+ sites

- Facilitated general communication efforts between participants, researchers, ethics board committees, IT department, and university administration.

Research Assistant, New York University Infant Action Lab, New York Jan 2017 – Aug 2018
Advisors: Karen Adolph, Ori Ossmy

- Led adult data collection efforts for studies examining the development of motor planning and action anticipation using EEG, head-mounted eye-tracking, and motion tracking.
- Developed and fully trained 10+ undergraduate and doctoral students on all lab study protocols.
- Additional responsibilities included recruiting participants, running data collections, coding and analyzing data, creating protocols, participating in lab meetings, contributing to presentations and publications, participating in peer review of publications, and aiding with lab maintenance.

Research Assistant, NYU Gallatin School of Individualized Study, New York Sep 2016 – Aug 2018
Advisor: Matthew Stanley

- Assisted in various research projects on the history of physics and the history of meteorology.
- Responsibilities included collecting and analyzing print and digital resources in preparation for various reports, conference papers, and publications, maintaining a resource archive and database on Zotero for computer files and hard copy materials across multiple projects.

PUBLICATIONS (* joint first authorship)

Journal Articles:

Tamis-LeMonda, C. S., Kachergis, G., Masek, L. R., Gonzalez, S. L., Soska, K. C., Herzberg, O., **Xu, M**., Adolph, K. E., Gilmore, R. O., Bornstein, M. H., Casasola, M., Fausey, C. M., Frank, M. C., Goldin-Meadow, S., Gros-Louis, J., Hirsh-Pasek, K., Iverson, J., Lew-Williams, C., MacWhinney, B., et al. (2024). Comparing apples to manzanas and oranges to naranjas: A new measure of English-Spanish vocabulary for dual language learners. *Infancy*, 1–25.

Soska, K.C.*, **Xu, M.***, Gonazalez, S. L., Herzberg, O., Tamis-Lemonda, C. S., Gilmore, R. O, & Adolph, K. E. (2021). (Hyper)active data curation: A video case study from behavioral science. *Journal of eScience Librarianship*, 10, e1208.s

Ossmy, O., Kaplan, B., Han, D., **Xu, M.**, Bianco, C., Mukamel, R., & Adolph, K.E. (2022). Real-time processes in the development of action planning. *Current biology*, 32, 190–199.

Ossmy, O., Han, D., Kaplan, B.E., **Xu, M.**, Bianco, C., Mukamel, R., & Adolph, K. E. (2021). Children do not distinguish efficient from inefficient actions during observation. *Scientific Reports*, 11, 18106.

Book Chapters:

Gilmore, R. O., **Xu, M.**, & Adolph, K. E. (2021). Data sharing. In S. Panicker & B. Stanley (Eds.), *How to conduct research ethically*. Washington, DC: American Psychological Association.

PRESENTATIONS

Xu. M. (October 2025) Visualizing Attention: Film and Eye Tracking Technologies in 20th Century Psychology. *Society for the History of Technology*, Luxembourg, LU.

Xu, M. (July 2025) Attention is in the Eye of the Beholder: Norman Mackworth and the Development of Eye Tracking Technology in the Mid-20th Century. *Three Societies Meeting (ESHHS—the European Society for the History of the Human Sciences; CHEIRON—the International Society for the History of the Social and Behavioral Sciences & SHP—the Society for the History of Psychology, APA division 26*), Paris, FR.

Ossmy, O., Kaplan, B., Han, D., **Xu, M.**, Bianco, C., & Adolph, K.E. (May 2021). Looking without seeing: Children do not distinguish efficient from inefficient means to achieve a goal. *Vision Sciences Society,* Novato, CA [Virtual].

Gonzalez, S., **Xu, M.**, Herzberg, O., Tamis-Lemonda, C. (March 2020). Toward consistency in English-Spanish vocabulary checklists for dual language learners. *International Congress of Infant Studies*, Glasgow, UK.

Herzberg, O., Fletcher, K., Schatz, J., **Xu, M**., Tamis-Lemonda, C.S., & Adolph, K.E. (March 2020). Exuberance in play: Infants' interactions with objects at home. *International Congress of Infant Studies,* Glasgow, UK.

Herzberg, O., Vasa, A., Gotfredsen, S., **Xu, M.**, Tamis-Lemonda, C. S., & Adolph, K.E. (March 2020). Infants' spontaneous locomotor activity at home. *International Congress of Infant Studies.* Glasgow, UK.

Ossmy, O., Kaplan, B., Han, D., **Xu, M.**, Bianco, C., & Adolph, K.E. (October 2019). What eye tracking and EEG tell us about the perception of multistep actions in children and adults. *Cognitive Development Society,* Louisville, KY.

Ossmy, O., Kaplan, B., **Xu, M.**, Adolph, K.E. (August 2019). An integrative approach to the development of problem solving. *Flux Society,* New York, NY.

Ossmy, O., Kaplan, B., Han, D., **Xu, M.**, Bianco, C., Adolph, K.E. (March 2019). What eye tracking and EEG tell us about perception of future-directed actions in children and adults. *Society for Research in Child Development*, Baltimore, MD.

Borenstein, H., Chen, A., **Xu, M.**, Kaplan, B., Rachwani, J., Tamis-LeMonda, C.S., & Adolph, K.E. (June 2018). A Toy's Story: Exploration, discovery, implementation, and construction. *International Congress on Infant Studies,* Philadelphia, PA.

Ossmy, O., Kaplan, B., **Xu, M.**, Han, D. & Adolph, K.E. (May 2018). Planning ahead: preparatory EEG activity predicts voluntary actions when the goal is not immediately accessible to perception. *Visual Sciences Society*, St. Pete Beach, FL.

Xu, M. (May 2018). The reciprocity of "real" and artificial intelligence. *NYU Gallatin Senior Symposium,* New York, NY.

Xu, M. (May 2018). Biological machines: The role of the human-machine analogy in early AI research. *NYU Undergraduate Research Conference,* New York, NY.

Xu, M. (May 2018). The development of action anticipation of tool use: EEG and Eye-tracking. *NYU Undergraduate Research Conference,* New York, NY.

Bianco, C. & **Xu, M.** (May 2018). Development of flexibility in tool use. *NYU Undergraduate Research Conference,* New York, NY.

Chen, A., **Xu, M.**, Borenstein, H., Kaplan, B., Rachwani, J., Tamis-LeMonda, C.D., & Adolph, K.E. (May 2018). The 6-Brick challenge: Perception is easy, action is hard. *NYU Undergraduate Research Conference,* New York, NY.

Xu, M. (March 2018). Development of flexible motor planning in children's tool use. *NYC Open Data Week @ NYU.* New York, NY.

Ossmy, O., Kaplan, B., **Xu, M.**, & Adolph, K.E. (March 2018). Development in flexibility in tool use. *Cognitive Neuroscience Society,* Boston, MA.

Ossmy, O., Kaplan, B., Han, D., **Xu, M**., & Adolph, K. E. (November 2017). Neural patterns underlying the development of planning in tool use. *International Society for Developmental Psychobiology,* Washington, D.C.

Ossmy, O., Kaplan, B., Han, D., **Xu, M**., & Adolph, K. E. (November 2017). Neural patterns underlying the development of planning in tool use. *Society for Neuroscience,* Washington, D.C.

Ossmy, O., Kaplan, B., Han, D., **Xu, M**., & Adolph, K. E. (October 2017). Development of flexibility in tool use. *Cognitive Development Society*, Portland, OR.

PROFESSIONAL AFFILIATIONS

American Association for the History of Medicine (AAHM)
American Historical Association (AHA)
American Psychological Association (APA)
Cheiron (International Society for the History of the Social and Behavioral Sciences)
History of Science Society (HSS)
International Conference of Infant Studies (ICIS)
Society for the History of Technology (SHOT)

TEACHING EXPERIENCE

Fall 2025	Teaching Assistant, Race, Racism and Medicine, Johns Hopkins University Instructor: Alexandre White
Spring 2025	Teaching Assistant, Rise of Modern Science, Johns Hopkins University Instructor: Alison McManus
Fall 2024	Teaching Assistant, Scientific Revolution, Johns Hopkins University Instructor: Meagan Allen
Spring 2018	Teaching Assistant, Introduction to Computer Science, New York University Instructor: Saadia Lgarch
Fall 2017	Teaching Assistant, Introduction to Computer Science, New York University Instructor: Joshua Clayton

SKILLS

Languages	English (native), Cantonese (fluent), Mandarin (intermediate), German (intermediate)

Computer	Adobe Systems (Illustrator, Premiere, Photoshop), Datavyu, Endnote, KoBoToolBox, Microsoft Office (Excel, PowerPoint, Word), Ruby, SPSS, Python, R Markdown, Zotero
Technology	EEG, Eye tracking, Motion tracking