

# Francis Mollica

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## Education

- 2014 **PhD Brain and Cognitive Sciences**, *University of Rochester*, Rochester, NY.
- 2014 **MA Brain and Cognitive Sciences**, *University of Rochester*, Rochester, NY.  
Committee: Steven Piantadosi, Michael Tanenhaus, Robbie Jacobs (chair)
- 2010 **BA Linguistics**, *University at Buffalo*, Buffalo, NY.  
Language and Cognition Concentration
- 2010 **BS Psychology**, *University at Buffalo*, Buffalo, NY.

## Honors and Awards

- 2018 **Student Travel Award**, *CUNY Sentence Processing*.
- 2017 **Student Travel Award**, *Cognitive Science Society*.
- 2016 **Honorable Mention**, *NSF Graduate Research Fellowship Program*.
- 2015 **Student Travel Award**, *Cognitive Science Society*.
- 2015 **Honorable Mention**, *NSF Graduate Research Fellowship Program*.
- 2014 **Outstanding Senior Award**, *Dept. of Linguistics, University at Buffalo*.
- 2012 **Grace W. Capen Academic Award**, *University at Buffalo*.

## Funding

- 2017 **Donald M. and Janet C. Bernard Fellowship**, *University of Rochester*.
- 2015 **Discover Grant**, *University of Rochester*.
- 2010 **Provost Scholarship**, *University at Buffalo*.
- 2010 **Johnson Controls Foundation Scholarship**.

## Journal Publications

- Mollica, F. and S. T. Piantadosi. (under review) *Logical word learning: The case of kinship*.
- Mollica, F. and S. T. Piantadosi. (under review) *Information theoretic bounds on human knowledge of language*.

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Register\*, J., **Mollica, F.**, and S. T. Piantadosi. (under review) *Semantic verification is flexible and sensitive to context.*

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Martí, L., **Mollica, F.**, S. T. Piantadosi, and C. Kidd. (to appear) *Certainty is primarily determined by past performance during concept learning.* *Open Mind.*

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2017 ● **Mollica, F.** and S. T. Piantadosi. "How data drives early word learning: a cross-linguistic waiting time analysis." In: *Open Mind* 1.2, pp. 67–77.

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## Conference Proceedings

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Yan, S.<sup>†</sup>, **Mollica, F.**<sup>†</sup>, and M. K. Tanenhaus. (under review) *A context constructivist account of contextual diversity.*

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Oey\*, L., **Mollica, F.**, and S. T. Piantadosi. (under review) *Adults use gradient similarity information in compositional rules.*

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2017 ● **Mollica, F.** and S. T. Piantadosi. "An incremental information theoretic buffer supports sentence processing." In: *Proceedings of the 39th Annual Meeting of the Cognitive Science Society.* Austin, TX: Cognitive Science Society., pp. 805–810.

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2017 ● **Mollica, F.**, S. Wade, and S. T. Piantadosi. "A rational constructivist account of the characteristic to defining shift." In: *Proceedings of the 39th Annual Meeting of the Cognitive Science Society.* Austin, TX: Cognitive Science Society., pp. 799–804.

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2016 ● Martí, L., **Mollica, F.**, S. T. Piantadosi, and C. Kidd. "What determines human certainty?" In: *Proceedings of the 38th Annual Meeting of the Cognitive Science Society.* Austin, TX: Cognitive Science Society., pp. 698–703.

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2015 ● **Mollica, F.** and S. T. Piantadosi. "Towards semantically rich and recursive word learning models." In: *Proceedings of the 37th Annual Meeting of the Cognitive Science Society.* Austin, TX: Cognitive Science Society., pp. 1607–1612.

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2015 ● **Mollica, F.**, S. T. Piantadosi, and M. K. Tanenhaus. "The perceptual foundation of linguistic context." In: *Proceedings of the 37th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society., pp. 1613–1618.

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## Conference Talks

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2018 ● **Mollica, F.**<sup>†</sup>, S. Yan<sup>†</sup>, and M.K. Tanenhaus. *A context constructivist account of contextual diversity.* 31st CUNY Sentence Processing Conference. Davis, CA.

2017

**Mollica, F.** and S.T. Piantadosi. *An incremental information theoretic buffer supports sentence processing*. 37th Annual Conference of the Cognitive Science Society. London, UK.

2017

**Mollica, F.**, S. Wade, and S.T. Piantadosi. *A rational constructivist account of the characteristic to defining shift*. 37th Annual Conference of the Cognitive Science Society. London, UK.

2017

**Mollica, F.** and S.T. Piantadosi. *An incremental information theoretic buffer supports sentence processing*. 30th CUNY Sentence Processing Conference. Cambridge, MA.

2015

**Mollica, F.** and S.T. Piantadosi. *Characterizing data-driven word learning: A cross-linguistic analysis*. More on Development. Columbus, OH.

2015

**Mollica, F.**, S.T. Piantadosi, and M.K. Tanenhaus. *The perceptual foundation of linguistic context*. 37th Annual Conference of the Cognitive Science Society. Los Angeles, CA.

## Conference Posters

2018

Rubio-Fernández, P. and **Mollica, F.** *Incremental contrasts: Why spotting a blue triangle is different in English than in Spanish*. The 31st CUNY Sentence Processing Conference. Davis, CA.

2018

**Mollica, F.** and E. Gibson. *Towards a psychological evaluation metric for semantic representations*. The 31st CUNY Sentence Processing Conference. Davis, CA.

2016

Galette, C.\*, **Mollica, F.**, and R. Raizada. *Unconverging the representation of ambiguous words*. 30th Anniversary National Conference on Undergraduate Research. Asheville, NC.

2015

**Mollica, F.**, S.T. Piantadosi, and M.K. Tanenhaus. *The perceptual foundation of linguistic context*. The 28th CUNY Sentence Processing Conference. Los Angeles, CA.

\* supervised undergraduate researcher

† co-authored work (equal contribution)

## Departmental/Colloquia/Invited Talks

2018

, Simplicity, data and inter-related systems: A computational account of kinship term acquisition. *Children's Acquisition of Kinship Knowledge: Theory and Method Workshop* University of Bristol, January, 2018.

- 2017 , An information-theoretic buffer supports language processing. *The Computational Psycholinguistics Lab* MIT, November, 2017.
- 2017 , A contextual diversity hypothesis of lexical retrieval in online language processing. *The Language Lab* MIT, October, 2017.
- 2017 , How data drives word learning: A cross-linguistic analysis. *The Language Lab* MIT, September, 2017.
- 2016 , Formalizing conceptual development: The case of kinship. *NRT Mini-Conference* University of Rochester, September, 2016.
- 2016 , How data drives word learning: A cross-linguistic analysis. *Evolution and Development Talk Series* University of Rochester, April, 2016.

## Teaching

- 2018 **BCS 259: Language Development**, *Teaching Assistant*, Spring, University of Rochester.
- 2017 **BCS 153: Cognition**, *Teaching Assistant*, Spring, University of Rochester.
- 2016 **BCS 310: Senior Seminar**, *Co-Instructor*, Fall, University of Rochester.
- 2016 **Building the Language Machine: An Intro to Computational Linguistics**, *Instructor*, Summer, Rochester Scholars Program.
- 2016 **BCS 153: Cognition**, *Teaching Assistant*, Spring, University of Rochester.
- 2015 **The Language Scientist: Linguist, Psychologist, Computer Scientist**, *Instructor*, Summer, Rochester Scholars Program.
- 2013 **LIN 207: Language, Society and the Individual**, *Teaching Assistant*, Fall, University at Buffalo.
- 2013 **PSY 207: Psychological Statistics**, *Teaching Assistant*, Summer, University at Buffalo.

## Ad-hoc Reviewing

**Journals:** Behavioral Research Methods, Language, Cognition & Neuroscience, Morphological Typology and Linguistic Cognition

**Conferences:** CogSci, COLING