Rachel Sabatello

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Undergraduate Education

University of Rochester	**Rochester, New York**
Bachelors of Arts Dual Majors in Brain & Cognitive Sciences and Psychology	*Expected May 2023*

Honors & Awards

Wiesman Summer Research Fellowship	2022
Research and Innovation Grant	2019 ‑ 2023
LGBTQ+ Pride Scholarship	2019 ‑ 2023
Dean's List	Fall 2021, Spring 2021, Spring 2022

Student Organizations

1st Gen Society	Member
Psi Chi Psychology Honor Society	Member
BCS & Neuroscience Undergraduate Council	Member
Journal of Undergraduate Research	Member

Statement of Interests

How we interact with others shapes who we are, how we perceive one another, and how we represent ourselves. My aim in my research is to expand our current understanding of the mechanisms behind speech perception and production, and what they might suggest about the human condition. I am specifically interested in the relationship between perception and cognition, learning and updating belief systems, language and psycholinguistics, and social identity.

Projects & Experience

Researcher ‑ Human Language Processing Lab   **Fall 2021 ‑ Current**

The HLP lab focuses on language processing, specifically how humans perceive speech signals despite the language invariance problem. Following my work on how prior expectations shape speech perceptionl adaptation, I am currently working with Dr. Jaeger on my honors thesis, in which will investigate how listeners' attention moderates perceptual adaptation, and how this flexibility may be influenced by social variables. I have constructed this question, designed the paradigm we will use, written an extensive literature review, coded the majority of the experiment, will be responsible for data collection and analyses, and intend to produce several posters in additon to those already presented, an oral defense, and a final research paper.

Research Assistant ‑ Language Processing and Biopsychology Lab   **Summer 2022 ‑ Current**

I am currently an RA in the Language Processing and Biopsychology lab under Dr. Yang and Dr. Chen. We aim to run an EEG-based study on sentence processing. The Mandarin verb *gěi* can be used preverbal or postverbal, however which usage is more prevalent is dependent on the area of the world. We will be examining if Mandarin speakers recognize a sntactic anomaly (P600) when encountering either usage of *gěi*. My duties include collecting data from subjects, analyzing this data, and contributing to the final research paper.

Research Assistant ‑ Internalizing Disorders & Emotional Adjustment Lab   **Summer 2022 ‑ Fall 2022**

During the summer of my junior year, I was a volunteer RA in the IDEA lab under Dr. Lisa Starr. I worked on the Linguistic Analysis of Adolescent Narratives of Stressful Life Events project under graduate student Gwyn Delap. Our goal was to transcribe longitudinal therapy interviews, and compare the usage of personal pronouns with self-reported depression scores. We hypothesized that higher scores of depression would be correlated with more prevalent usage of the personal pronouns "I", "me", and "my" compared to "we" and "ours."

Lab Technician - Xia Lab   Spring 2020
I was an RA in the University of Rochester's Pharmacology & Physiology Department. In this lab, I performed standard genetics lab procedures on mice for research on the role of synaptic plasticity with respect to memory and mental health. I was also responsible for keeping organized records of my procedures, and attended weekly lab meetings.

Projects, Posters, & Presentations

13th International Conference of Experimental Linguistics   Fall 2022
Tan, M., Sabatello, R., Savic, I., & Jaeger, T. F., (2022, October). *Listeners' categorization behaviour correlates with gradient changes in exposure statistics.* [Talk]. ExLing 2022, Paris.

Undergratuate Program in Biology and Medicine Poster Session   Fall 2022
Sabatello, R., Cummings, S., & Jaeger, T. F., (2022, September). *Investigating the automaticity of speech perception and adaptation.* [Poster presentation]. Fall 2022 Undergratuate Program in Biology and Medicine Poster Session, University of Rochester.

Summer Scholars Poster Session   Summer 2022
Sabatello, R., Cummings, S., & Jaeger, T. F., (2022, August). *Investigating the automaticity of speech perception and adaptation.* [Poster presentation]. Summer 2022 Summer Scholars Poster Session, University of Rochester.

Undergraduate Research Symposium   Spring 2022
Sabatello, R., Savic, I., Deis, D., Tan, M., & Jaeger, T. F., (2022, April). *How do listeners recognize the same words across different talkers' speech?* [Poster presentation]. 2022 Summer Scholars Poster Session, University of Rochester].

Undergraduate Research in Cognitive Science   Fall 2021 - Spring 2022
Replication project of Kleinschmidt & Jaeger (2016)[1] exploring selective adaptation of speech perception as a statistical inference. Designed with PI Dr. Florian Jaeger, executed through Mturk, and analyzed using Rstudio.

Long Island Science and Engineering Fair (LISEF)   Spring 2019
Sabatello, R., (2019, March). *A study into transposable elements: the bridge between the brain, the environment, genetic makeup, and tumor development in Betta splendens.* [Poster presentation]. Spring 2019 Long Island Science and Engineering Fair, SUNY Old Westbury.

Technical Skills

Microsoft Office: *Word, Excel, Powerpoint*	Expert: >100 hours
Rstudio: *data analysis*	Intermediate: ~ 75 hours
SPSS: *data analysis*	Beginner: ~ 20 hours
EEG Data Collection: *collecting and analysing participant data*	Beginner: ~20 hours

Relevant Coursework

Neuroscience
- *Intro to Cognitive Sciences:* A broad overview of brain & cognitive sciences
- *Neural Foundations of Behavior:* Brain structures and functions
- *Perception & Action:* How the body perceives the world using sensory and other external information

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[1] Kleinschmidt, D. F. & Jaeger, F. T. (2016). What do you expect from an unfamiliar talker? *Cognitive Science.*

Language & Linguistics

- *Intro to Linguistics:* Broad overview of the different subfields in linguistics
- *Cognition & Writing:* The cognitive mechanisms behind writing and how they differ from speech
- *Language Development:* The stages of language acquisition in children and their implications
- *Language & Psycholinguistics:* The cognitive processes unique to communication
- *Modern English Grammar:* Language usage as a function of social identity
- *Language & Advertising:* How advertisements use language to sell products
- *Language Use & Understanding:* The cognitive mechanisms that underlie speech

Social Psychology

- *Intro to Psychology:* Introduction to human psychology
- *Relationship Process & Emotion:* Emotional development within interpersonal relationships
- *Social & Emotional Development:* How children develop personalities and attitudes
- *Social Psychology & Individual Differences:* Societal influences on identity and social hierarchy
- *Psychopathology:* Introduction to psychopathology and the DSM 5
- *Psychology of Human Sexuality:* Exploration of sex, gender, and interpersonal relationships
- *Seminar on Anxiety & Depression:* Current research review on internalizing disorders

Research

- *Applied Statistics I:* Introduction to statistical analysis (centered on Rstudio)
- *Research Methods in Psychology:* Methods used to develop and analyze viable research in psychology
- *Undergraduate Research in Cognitive Science:* Replication study: adaptation of speech perception