MIRIAM E. SCHWYCK, Ph.D.

Previously Miriam E. Weaverdyck mweaverdyck.github.io | mes2388@columbia.edu

ACADEMIC APPOINTMENTS

2018

| 2023–Present | Advisor: Meghan Meyer, Ph.D. |
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| EDUCATION | |
| 2023 | Ph.D., Psychology, University of California, Los Angeles, CA Advisor: Carolyn Parkinson, Ph.D. |

M.A., Psychology, University of California, Los Angeles, CA Advisors: Carolyn Parkinson, Ph.D.; Matthew Lieberman, Ph.D.

2013 B.A., Psychology, Mathematical Sciences, Bethel College, KS

Advisors: Dwight Krehbiel, Ph.D.; Lisa Thimm, Ph.D.

Honors: Summa Cum Laude

FELLOWSHIPS, HONORS, AND AWARDS

| 2023 | Shelley E. Taylor Dissertation Award, UCLA |
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| 2022 | Dissertation Year Fellowship, UCLA |
| 2022 | Graduate Travel Award, Society for Personality and Social Psychology |
| 2021 | Poster Award, Social & Affective Neuroscience |
| 2020 | Graduate Research Fellowship, NSF |
| 2019 | Graduate Research Mentorship Fellowship, UCLA |
| 2019 | Fellow, Kavli Summer Institute in Cognitive Neuroscience |
| 2019 | Fellow, NIA Summer School in Social Neuroscience & Neuroeconomics |
| 2019 | Harold H. Kelley Award: Best Basic Research Paper, UCLA Social Psychology |
| 2019 | Travel Grant, International Convention of Psychological Science |
| 2019 | Poster Award, Social & Affective Neuroscience |
| 2018 | Fellow, São Paulo School of Advanced Sciences on Social and Affective Neuroscience |
| 2018 | Graduate Summer Research Mentorship Fellowship, UCLA |
| 2017 | Graduate Dean's Scholar Award, UCLA |
| 2009-2013 | Bethel College |
| | Academic Thresher Scholarship, STEM Scholarship, Music Scholarship, |
| | Music Scholar Award, Art Scholarship, Dean's List |

PUBLICATIONS

Please note that prior to 2021, I published and presented under the name Miriam E. Weaverdyck *Denotes equal contributions

ORCID: 0000-0002-4779-7876

Google Scholar Profile: https://scholar.google.com/citations?user=8dxN6C8AAAAJ

UNDER REVIEW

Schwyck, M.E., Du, M., & Parkinson, C. (in revision). The role of one's own social network position in learning new networks: Brokerage is associated with better network learning. *Journal of Experimental Psychology: General.* OSF Preprint

- **Schwyck, M.E.** & Parkinson, C. (in revision). Predicting that birds of a feather will flock together: Expectations of homophily for others but not the self. *Journal of Experimental Social Psychology*. OSF Preprint
- Ma de Sousa, A.Q., **Schwyck, M.E.**, Furtado Fernandes, L., Ford, E., Babür, B.G., Lu, C., Zimmerman, J.C., Yu, H., Burns, S.M.*, & Baek, E.C.* (under review). Loneliness is associated with unstable and distorted emotion transition predictions. OSF Preprint

PUBLISHED

- **Schwyck, M.E.**, Du, M., Natarajan, P., Chwe, J.A., & Parkinson, C. (2023). Neural encoding of novel social networks: Evidence that perceivers prioritize others' centrality. *Social Cognitive and Affective Neuroscience*, 18(1) 1-9. PDF
- **Schwyck, M.E.***, Du, M.*, Li, Y., Chang, L., & Parkinson, C. (2023). Similarity among friends serves as a social prior: The assumption that "Birds of a feather flock together" shapes social decisions and relationship beliefs. *Personality and Social Psychology Bulletin*, 50(6). PDF OSF
- Sahi, R.S.*, **Schwyck, M.E.***, Parkinson, C., & Eisenberger, N.I. (2021). Having more virtual interaction partners during COVID-19 physical distancing measures may benefit mental health. *Scientific Reports*. 11(18273) PDF OSF
- **Weaverdyck, M.E.**, Thornton, M.A., & Tamir, D.I. (2021). The representational structure of mental states generalizes across target people and stimulus modalities. *NeuroImage*, 238(118258) 1-9. PDF OSF
- **Weaverdyck**, M.E., Lieberman, M.D., & Parkinson, C. (2020). Multivoxel pattern analysis in fMRI: A practical introduction for social and affective neuroscientists. *Social Cognitive and Affective Neuroscience*, 15(4) 487-509. PDF
- Thornton, M.A., **Weaverdyck, M.E.**, & Tamir, D.I. (2019). The brain represents people as the mental states they habitually experience. *Nature Communications*, 10(2291) 1-10. PDF OSF
- Thornton, M.A., **Weaverdyck, M.E.**, Mildner, J.N., & Tamir, D.I. (2019). People represent their own mental states more distinctly than others'. *Nature Communications*, 10(2117) 1-9. <u>PDF OSF</u>
- Thornton, M.A., **Weaverdyck, M.E.**, & Tamir, D.I. (2019). The social brain automatically predicts others' future mental states. *Journal of Neuroscience*, *39*(1) 140-148. PDF OSF
- Weaverdyck, M.E., & Parkinson, C. (2018). The neural representation of social networks. *Current Opinion in Psychology*, 24, 58-66. PDF
 UCLA Harold H. Kelley Award: Best Basic Research Paper
- Jones, M.A., Shelton, B.C., & **Weaverdyck, M.E.** (2014). On God's Number(s) for Rubik's Slide. *The College Mathematics Journal*, 45(4), 267-275. PDF
- Anderson, A.L.*, **Weaverdyck, M.E.***, & Krehbiel, D. (2011, March). *Discovering GEMS in music: Armonique digs for music you like*. Paper presented at the National Conference for Undergraduate Research, Ithaca College, NY. PDF

IN PREPARATION

- **Schwyck, M.E.***, Guassi Moreira, J.F.*, & Parkinson, C. (in prep). Do different aspects of social distance differentially predict social behavior?
- **Schwyck, M.E.**, Kim, J., Chey, J., Zerubavel, N., Bearman, P., Youm, Y. Parkinson, C. (in prep). Contention in real-world social networks: Examining the neural and behavioral correlates of structural equivalence.

PRESENTATIONS

*Denotes multiple presenters

INVITED TALKS

- **Schwyck, M.E.** (2025) *Social Network Analysis*. Naturalistic Methods Beyond Neuroimaging: Capturing Behavior in the Wild Preconference, Social and Affective Neuroscience Society Conference, Chicago, IL.
- **Schwyck, M.E.** (2024) *Tracking Our Social Worlds*. Social and Affective Processes Seminar, Columbia University, New York, NY.
- **Schwyck, M.E.**, Du, M., & Parkinson, C. (2024) *Tracking relationships: Uncovering how people acquire and neurally encode others' social networks*. International Network for Social Network Analysis SunBelt Conference, Edinburgh, Scotland.
- **Schwyck, M.E.**, Du, M., & Parkinson, C. (2024) *The role of one's own social network position in learning new networks: Brokerage is associated with better network learning*. Social and Affective Neuroscience Conference, Toronto, ON, Canada.
- **Schwyck, M.E.** (2023) *Tracking relationships: Uncovering how people acquire, represent, use, and predict social network information.* Social Connection Lab Meeting, PI Elisa Baek, University of Southern California, Los Angeles, CA.
- Schwyck, M.E., Kim, J., Chey, J., Zerubavel, N., Bearman, P., Youm, Y., & Parkinson, C. (2023) Contention in real-world social networks: Examining the neural and behavioral correlates of structural equivalence. Social and Affective Neuroscience Conference, Santa Barbara, CA.
- **Schwyck, M.E.** (2023) *Introduction to fMRIPrep*. Lab Meeting, PI Yoosik Youm, Yonsei University, Seoul, South Korea.
- Weaverdyck, M.E., Thornton, M.A., & Tamir, D.I. (2016). *Mental state space expands for self and contracts for others*. New York Social & Affective Neuroscience Meet-Up, Manhattan, NY.
- **Weaverdyck, M.E.**, Jones, M.A., & Shelton, B.C. (2013). *Finding God's Number(s) for the Rubik's Slide puzzle: An algebraic graph-theoretic analysis.* Undergraduate Research, Internship and Creative Activity Symposium, North Newton, KS.
- **Weaverdyck, M.E.**, Gongora, T., & Unruh, N. (2013). *Positive and negative appraisal: How feedback affects attitudes and performance in math*. Undergraduate Research, Internship and Creative Activity Symposium, North Newton, KS.
- **Weaverdyck, M.E.**, Jones, M.A., & Shelton, B.C. (2012). *On God's Number(s) for Rubik's Slide*. Mathematical Association of America MathFest Conference, Madison, WI.

POSTERS

- Mundy, K., Schwyck, M.E., & Meyer, M.L. (2025) Lonely individuals idiosyncratically interpret social information from novel narratives. Social and Affective Neuroscience Society Conference, Chicago, IL.
- **Schwyck, M.E.**, Mundy, K., & Meyer, M.L. (2025) *Neural encoding of valenced social networks*. Society for Affective Science Conference, Portland, OR.
- Ma De Sousa, A.Q., **Schwyck, M.E.**, Burns, S., Babür, B., Chang, L., Zimmeman, J., & Baek, E.C. (2025). *Do lonely individuals have idiosyncratic neural representations when thinking about their own and others' emotional transitions?* Society for Personality and Social Psychology, Denver, CO.

- Basyouni, R., **Schwyck, M.E.**, Du, M., & Parkinson, C. (2024). *Tracking and applying knowledge of centrality in social networks*. Social and Affective Neuroscience Conference, Toronto, ON, Canada.
- Guassi Moreira, J.F., **Schwyck, M.E.**, & Parkinson, C. (2024) What drives the link between psychological distance and social behavior? Society for Affective Science Conference, New Orleans, LA
- **Schwyck, M.E.** & Parkinson, C. (2024). *Assumptions of homophily shape social decisions and relationship beliefs.* Society for Personality and Social Psychology Conference, San Diego, CA.
- **Schwyck, M.E.**, Du, M., & Parkinson, C. (2022). *Learning the structure of social worlds: Brokerage affects one's ability to learn new social networks*. Society for Personality and Social Psychology Convention, San Francisco, CA.
- **Weaverdyck, M.E.**, Du, M., Natarajan, P., Chwe, J.A., & Parkinson, C. (2021). *Neural encoding of new social network structures*. Social and Affective Neuroscience Conference, Virtual.
- Weaverdyck, M.E., Du, M., Natarajan, P., Chwe, J.A., & Parkinson, C. (2019). *Contextual goals shape the neural representation of social networks*. UCLA Brain Research Institute's Neuroscience Poster Session, Los Angeles, CA.
- Weaverdyck, M.E., Du, M., Natarajan, P., Chwe, J.A., & Parkinson, C. (2019). *Contextual goals shape the neural representation of social networks*. Social and Affective Neuroscience Conference, Miami, FL.
- **Weaverdyck, M.E.**, Du, M., Li, Y., Chang, L., & Parkinson, C. (2019). *Social network knowledge shapes trust behavior*. International Convention of Psychological Science, Paris, FR.
- **Weaverdyck**, M.E., Du, M., Li, Y., Chang, L., & Parkinson, C. (2019). *Social network knowledge shapes and is shaped by trust behavior*. Society for Personality and Social Psychology Conference, Portland, OR.
- **Weaverdyck, M.E.**, Thornton, M.A., & Tamir, D.I. (2018). *Representational similarity analyses reveal stable mental state concepts for self and others*. São Paulo School of Advanced Sciences on Social and Affective Neuroscience, São Paulo, BR.
- **Weaverdyck, M.E.**, Thornton, M.A., & Tamir, D.I. (2018). *Neural representations of mental states remain stable across modalities and targets*. Social and Affective Neuroscience Conference, Brooklyn, NY.
- **Weaverdyck, M.E.**, Thornton, M.A., & Tamir, D.I. (2017). *Representational similarity analyses reveal stable mental state concepts for self and others*. Social and Affective Neuroscience Conference, Los Angeles, CA.
- **Weaverdyck, M.E.**, Thornton, M.A., & Tamir, D.I. (2017). *Representational similarity analyses reveal stable mental state concepts for self and others*. Society for Personality and Social Psychology Conference, San Antonio, TX.
- Weaverdyck, M.E.*, Anderson, A.L.*, & Krehbiel, D. (2011). *Discovering GEMS in music: Armonique digs for music you like*. Undergraduate Research, Internship and Creative Activity Symposium, North Newton, KS.
- Anderson, A.L.*, **Weaverdyck, M.E.***, & Krehbiel, D. (2011). *Discovering GEMS in music: Armonique digs for music you like*. National Conference for Undergraduate Research, Ithaca, NY.
- Weaverdyck, M.E.*, Anderson, A.L.*, & Krehbiel, D. (2010). *Does liking predict emotional and physiological responses to music*. Undergraduate Research, Internship and Creative Activity Symposium, North Newton, KS.

RESEARCH EXPERIENCE

| 2023-Present | Postdoctoral Scholar, Columbia University New York, NY Columbia Social Neuroscience Lab, PI: Meghan Meyer, Ph.D. |
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| 2017–2023 | Graduate Student Researcher, University of California, Los Angeles Los Angeles, CA Computational Social Neuroscience Lab, PI: Carolyn Parkinson, Ph.D. |
| 2015–2017 | Research Specialist, Princeton University Princeton, NJ Princeton Social Neuroscience Lab, PI: Diana I. Tamir, Ph.D. |
| 2014–2015 | Lab Coordinator, Rutgers University New Brunswick, NJ Rutgers Lab for Developmental Language Studies, PI: Kristen Syrett, Ph.D. |
| 2009–2013 | Undergraduate Student Researcher, Bethel College North Newton, KS PI: Dwight Krehbiel, Ph.D. |

TRAINING AND PROFESSIONAL DEVELOPMENT

| 2022 | New England Future Faculty Workshop, Northeastern University, Boston, MA |
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| 2020 | Neuromatch Academy: Interactive Track, Course Project |
| 2019 | Kavli Summer Institute in Cognitive Neuroscience, University of California, |
| | Santa Barbara, Santa Barbara, CA |
| 2019 | Summer School in Social Neuroscience & Neuroeconomics, Duke University, |
| | Durham, NC |
| 2018 | São Paulo School of Advanced Sciences on Social and Affective Neuroscience, |
| | Mackenzie Presbyterian University, São Paulo, BR |
| 2018 | Machine Learning with Python, Quantitative and Computational Biology Collaboratory, |
| | University of California, Los Angeles, Los Angeles, CA |

TEACHING EXPERIENCE

Guest Lecturer, Columbia University, New York, NY

Fall 2024 Current Topics in Cognitive Neuroscience (Graduate course)

Social Cognition

Guest Lecturer, University of California, Los Angeles, Los Angeles, CA

Spring 2022 Psych 236 Methods in Social and Affective Neuroscience (Graduate course)

Introduction to MVPA

Fall 2021 Psych 137I Social Influence (Undergraduate course)

Neural Processes of Persuasion & Influence

Winter 2021 Psych 135 Social Psychology (Undergraduate course)

Introduction to Social Neuroscience

Teaching Assistant, University of California, Los Angeles, Los Angeles, CA

Spring 2020 Psych 85 Introduction to Cognitive Science (Undergraduate course)

Spring 2018 Psych 10 Introductory Psychology (Undergraduate course)

Graduate Student Instructor, University of Michigan, Ann Arbor, MI

Summer 2017 Michigan Math and Science Scholars (Highschool course)

Mathematics of Decisions, Elections, and Games

Summer 2018 Michigan Math and Science Scholars (Highschool course)

Mathematics of Decisions, Elections, and Games

Academic Tutor, Bethel College, North Newton, KS

2010–2013 Center for Academic Development (Undergraduate students)

Undergraduate Student Instructor, University of Michigan, Ann Arbor, MI

Summer 2012 Michigan Math and Science Scholars (Highschool course)

Mathematics of Decisions, Elections, and Games

SERVICE

COMMUNITY SERVICE

2025 Methods Roundtable Host

Society for Affective Science, Social Network Analysis

2025 Conference Abstract Reviewer

Social and Affective Neuroscience Society

2018–Present Reviewer

Social Cognitive and Affective Neuroscience, Social Neuroscience, Nature Neuroscience, Psychonomic Bulletin & Review, Nature Communications

2018 Conference Volunteer

Society for Affective Science Conference

2013–2014 Pro Bono Legal and Administrative Assistant

Mennonite Voluntary Service

Immigration Legal Services Pro Bono Program, Catholic Charities, Washington, DC

DEPARTMENTAL AND UNIVERSITY SERVICE

University of California, Los Angeles, Los Angeles, CA

2017–2022 Underrepresented Graduate Students in Psychology

Transfer Outreach Committee, Brownbag Committee

Winter 2021 Inclusivity Lab Meeting (organizer, discussion leader)

A conversation on creating supportive and inclusive communities within academia

2020–2021 Social Colloquium Representative

Spring 2021 How to Maximize Your Summer Workshop

Winter 2020 Ask a Graduate Student Panel

Winter 2020 Applying to Undergraduate Research Programs Workshop
Fall 2019 Maximizing Your Transfer Experience Networking Workshop

2018–2019 Queers in STEM Mentor

2017–2018 Advancing Women in Science and Engineering

Fall 2018 Success in the Life Sciences Workshop

OPEN SCIENCE

GitHub profile: https://github.com/mweaverdyck

Also see lab repositories: github.com/Dartmouth-Social-Neuroscience-Lab, github.com/CSNLab, github.com/PrincetonUniversity/prsonpipe

Open Science Framework profile: https://osf.io/7kc49/

TECHNICAL SKILLS

Programming Languages

- Python, Psychopy
- R
- Bash
- jsPsych
- FSL
- LaTeX

Analyses

- Multivoxel Pattern Analysis, Representational Similarity Analysis
- Machine learning
- Eyetracking
- Designed and programmed custom modular fMRI analysis pipelines

Platforms, Equipment

- GitHub
- Pavlovia
- Prolific
- MTurk
- Qualtrics
- fMRI

PROFESSIONAL REFERENCES

Meghan Meyer, Ph.D.

Assistant Professor, Columbia University Postdoc Advisor mlm2378@columbia.edu

Carolyn Parkinson, Ph.D.

Associate Professor, University of California, Los Angeles *Ph.D. and M.A. Advisor, Dissertation Committee Chair* cparkinson@ucla.edu

Matthew Lieberman, Ph.D.

Professor, University of California, Los Angeles Secondary M.A. Advisor, Dissertation Committee Member mdlieber99@gmail.com