

Benjamin M. Silver

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EDUCATION

- 2019– **Columbia University**, Ph.D. in Psychology
Advisor: Kevin Ochsner, Ph.D.
Secondary advisor: Chris Baldassano, Ph.D.
- 2021–2023 **Columbia University**, M.Phil. in Psychology
Advisor: Kevin Ochsner, Ph.D.
Secondary advisor: Chris Baldassano, Ph.D.
- 2019–2021 **Columbia University**, M.S. in Psychology
Advisor: Kevin Ochsner, Ph.D.
Secondary advisor: Chris Baldassano, Ph.D.
- 2013–2017 **Brown University**, Honors Sc.B in Cognitive Neuroscience, 3.95 GPA
Focus in Learning and Memory
Honors thesis: *The relationship between pretend play and working memory in preschool aged children*
Advisor: Dima Amso, Ph.D.

AWARDS AND FUNDING

- 2024 Psychology Department Graduate Travel Award
- 2023 APS Teaching Fund Small Grant
- 2023 POD Network GPPD Career Development Grant
- 2023 Fellowship, ComSciCon Flagship Workshop
- 2023 Graduate School of Arts and Sciences Conference Matching Travel Award
- 2023 Arts and Sciences Graduate Council Student Travel Grant
- 2022 Fellowship, Kavli Summer Institute in Cognitive Neuroscience
- 2022 Seed Grant, Columbia University Zuckerman Institute
- 2021 Teaching Observation Fellowship, Columbia University
- 2021 Neurohackademy participant
- 2020 Psychology Department Lead Teaching Fellowship, Columbia University
- 2017 Member, Sigma Xi
- 2016 Undergraduate Teaching and Research Award, Brown University
- 2015 BrownConnect LINK Award, Brown University
- 2013 Semifinalist, INTEL Science Talent Search Competition

RESEARCH EXPERIENCE

- 2019– Graduate Student Research Fellow
SCAN Lab, Psychology Department, Columbia University
Advisor: Kevin Ochsner, Ph.D.
- 2017–2019 Research Coordinator
Jones Lab, Sackler Institute for Developmental Psychobiology, Weill Cornell Medical College

Advisor: Rebecca M. Jones, Ph.D.; Jonathan D. Power, M.D., Ph.D.

2015–2017 Undergraduate Researcher
Developmental Cognitive Neuroscience Lab, Cognitive, Linguistic & Psychological
Sciences Department, Brown University
Advisor: Dima Amso, Ph.D.

PUBLICATIONS

Manuscripts in prep/under review

Silver, B.M., Ochsner, K.N. (under review). Changes in online moral discourse about public figures during #MeToo. <https://doi.org/10.31234/osf.io/yr56t>

Silver, B.M., Yu, W., Davachi, L., Ochsner, K.N. (under review). What are my friends really like? How we change our perceptions of familiar others' traits and actions. <https://doi.org/10.31234/osf.io/n75xc>

Silver, B.M., Meyer, M., Davachi, L., Ochsner, K.N. (in prep). Changes in self-views in response to the 2020 U.S. presidential election.

Published

Top-rated abstracts from the 2022 Annual Meeting of the Society for Affective Science. *Affec Sci* (2023). <https://doi.org/10.1007/s42761-022-00175-w>

Bos, D.J., Barnes, E.D., **Silver, B.M.**, Ajodan, E.L., Clark-Whitney, E., Scult, M.A. Power, J.D., Jones, R.M. (2021). An effort-based social feedback paradigm reveals aversion to popularity in socially anxious participants and increased motivation in adolescents. *PLOS ONE*.
<https://doi.org/10.1371/journal.pone.0249326>

Lynch, C.J., Voss, H., **Silver, B.M.**, Power, J.D. (2021). On measuring head motion and effects of headmolds during fMRI. *Neuroimage*.
<https://doi.org/10.1016/j.neuroimage.2020.117494>

Silver, B.M., Conte, M.M., Victor, J.D., Jones, R.M. (2020). Visual search for circumscribed interests in autism is similar to that of neurotypical individuals. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2020.582074>

Lynch, C.J., **Silver, B.M.**, Dubin, M.J., Martin, A., Jones, R.M., Power, J.D. (2020). A prevalent, sex-biased respiratory pattern influences functional connectivity MRI in young adults. *Nature Communications*.
<https://doi.org/10.1038/s41467-020-18974-9>

Bos, D.J., **Silver, B.M.**, Barnes, E., Ajodan, E.L., Silverman, M.R., Clark-Whitney, E., Tarpey, T., Jones, R.M. (2019). Adolescent-specific motivation deficits in autism versus typical development. *Journal of Autism and Developmental Disorders*. <https://doi.org/10.1007/s10803-019-04258-9>

Power, J.D., Lynch, C. J., Dubin, M.J., **Silver, B.M.**, Martin, A., Jones, R.M. (2019). Characteristics of respiratory measures in young adults scanned at rest, including systematic changes and “missed” deep breaths. *Neuroimage*.
<https://doi.org/10.1016/j.neuroimage.2019.116234>

Power, J.D., Lynch, C.J., **Silver, B.M.**, Dubin, M.J., Martin, A., Jones, R.M. (2019). Distinctions among real and apparent respiratory motions in human fMRI data. *Neuroimage*. <https://doi.org/10.1016/j.neuroimage.2019.116041>

Bos, D.J., Silverman, M.R., Ajodan, E.L., Martin, C., **Silver, B.M.**, Brouwer, G., Di Martino, A., Jones, R.M. (2019). Rigidity coincides with reduced cognitive control to affective cues in children with autism. *Journal of Abnormal Psychology*. <https://doi.org/10.1037/abn0000423>

Power, J.D., **Silver, B.M.**, Silverman, M.R., Ajodan, E.L., Bos, D.J., Jones, R.M. (2019). Customized head molds reduce motion during resting state fMRI. *Neuroimage*. doi.org/10.1016/j.neuroimage.2019.01.016

PRESENTATIONS

First author

- 2023 **Silver, B.M.**, Baldassano, C., Davachi, L., Ochsner, K.N. *Do you like me back? Motivated perceptions and cognitive effort for potential romantic partners*. Poster presented at the Social and Affective Neuroscience Society. Santa Barbara, CA.
- 2023 **Silver, B.M.**, Yu, W., Davachi, L., Ochsner, K.N. *What are my friends really like? Motivated perceptions after completing a virtual escape room*. Poster presented at the Society for Affective Science. Long Beach, CA.
- 2022 **Silver, B.M.**, Baldassano, C., Davachi, L., Ochsner, K.N. *Romantic remembering: Social information determines individualized reward value and motivates memory*. Poster presented at the Social and Affective Neuroscience Society. Online.
- 2022 **Silver, B.M.**, Ochsner, K.N. *Morality and #MeToo: Motivated impression updating on Twitter*. Flash talk presented at the Society for Affective Science; Online.
- Denoted as “High-ranking abstract”; invited to submit abstract as conference publication
- 2020 **Silver, B.M.**, Li, D.H., Mayers, A., Croxson, P.L. *Neuroscience education from home: Challenges and opportunities*. Interactive talk to be presented at the Neuromatch conference; Online.
- 2019 **Silver, B.M.**, Lynch, C.J., Clark-Whitney, E., Barnes, E., Power, J.D., Jones, R.M. *Longitudinal resting-state fMRI using individual-specific analyses in autism*. Poster presented at the FLUX Congress; New York, NY.
- 2019 **Silver, B.M.**, Barnes, E., Clark-Whitney, E., Conte, M.M., Victor, J.D., Jones, R.M. *Developing a novel visual search task personalized for individual interests*. Poster presented at the INSAR Conference; Montreal, Canada.
- 2018 **Silver, B.M.**, Bos, D.J., Ajodan, E., Silverman, M., Power, J.D., Jones, R.M. *Preferred interests interfere with self-control in autism*; Poster presented at The Social and Affective Neuroscience Society Conference; Brooklyn, NY.
- 2017 **Silver, B.M.** *The relationship between pretend play and working memory in preschool aged children*; Oral undergraduate honors thesis presentation;

Providence, RI.

Middle author

- 2023 Li, D.H., Gumnit, M., Shah, A., Bravo, I., **Silver, B.M.**, Patel, P., Miller, M., Remole, K.E., Imbimbo, J., Shohamy, D., Croxson, P.L., Mayers, A.M. *Brain Research Apprenticeships In New York At Columbia (BRAINYAC) strengthens STEM identity and self-efficacy in high school students through coursework and mentored research*. Poster presented at the Society for Neuroscience Annual Meeting; Washington, D.C.
- 2021 Li, D.H., **Silver, B.M.**, Patel, P., Remole, K.E., Imbimbo, J., Mayers, A.M., Shohamy, D., Croxson, P.L. *Advancing high school research exposure through BRAINYAC: Brain Research Apprenticeships In New York At Columbia*. Poster presented at the Society for Neuroscience Annual Meeting; Online
- 2021 Croxson, P.L., Li, D.H., **Silver, B.M.**, Patel, P., Remole, K.E., Imbimbo, J., Mayers, A., Shohamy, D. *Advancing high school research exposure through Brain Research Apprenticeships in New York at Columbia (BRAINYAC)*. Poster presented at BRAIN Initiative Investigators Meeting; Online
- 2019 Barnes, E., **Silver, B.M.**, Clark-Whitney, E., Ajodan, E.L., Scult, M., Jones, R.M. *Studying teen choices on social media: validation of a novel social decision-making task*. Poster presented at the FLUX Congress; New York, NY.
- 2019 Jones, R.M., Barnes, E., Ajodan, E.L., **Silver, B.M.**, Clark-Whitney, E., Scult, M. *Behavioral and neural correlates of adolescent-specific social motivations: Implications for psychosocial treatments*. Talk presented at the Anxiety and Depression Conference; Chicago, IL.
- 2019 Bos. D.J., Ajodan, E.L., Silverman, M.R., **Silver, B.M.**, Martin, C., Di Martino, A., Jones, R.M. *Similarities and differences in cognitive control to motivating cues in autism and (co-morbid) ADHD*. Poster presented at the INSAR Conference; Montreal, Canada.
- 2019 Bos. D.J., Tarpey, T., **Silver, B.M.**, Ajodan, E.L., Silverman, M.R., Martin, C., Jones, R.M. *Absence of adolescent-specific sensitivity to motivating cues in Autism*. Poster presented at the INSAR Conference; Montreal, Canada.
- 2018 Bos. D.J., Silverman, M.R., Ajodan, E.L., Martin, C., **Silver, B.M.**, Di Martino, A., Jones, R.M. *Cognitive control to affective cues across neurodevelopmental disorders*; Poster presented at the Eunethydis Conference; Edinburgh, Scotland.
- 2018 Ajodan, E., **Silver, B.M.**, Silverman, M., Southerland, A., Chanda, K., Stubbs, E.A., Lord, C., Rehg, J., Rozga, A., Jones, R.M. *Gaze patterns during parent-child versus clinician-child interactions*; Poster presented at the INSAR Conference; Rotterdam, Netherlands.
- 2018 Bos, D.J., Silverman, M., Ajodan, E., Martin, C., **Silver, B.M.**, Di Martino, A., Jones, R.M. *Reconciling the co-occurrence of impulsivity and insistence on sameness in ASD*; Talk presented at the INSAR Conference; Rotterdam, Netherlands.

2017 Freier, L., Gunther, K., **Silver, B.M.**, Badre, D., Amso, D. *3- to 7-year-olds' use of working memory gating strategies in a naturalistic task*; Poster presented at the Society for Research in Child Development Conference; Austin, TX.

RELEVANT RESEARCH SKILLS

- Neuroimaging analysis – NIPY suite, FSL, SPM, AFNI, Freesurfer, Connectome Workbench
- Data analysis/organization – Python, R, Matlab, bash/tcsh, SPSS, Excel, REDCap
- Experimental design – PsychoPy3, PsychToolbox, Qualtrics, E-Prime
- Video and gaze coding – Interact, Datavyu, Yabus, Boris
- Clinical assessments – Autism Diagnostic Observation Schedule (reliable on Modules 3, 4), Wechsler Adult Intelligence Scale–IV, Differential Ability Scales–II, Mullen, Woodcock–Johnson–III, Brief Observation of Social Communication Change

TEACHING AND MENTORING EXPERIENCE

2023 Participant, Center for Teaching and Learning Innovative Course Design Workshop

- Five-week workshop devoted to creating and designing an original undergraduate course with innovative elements
- Designed a course entitled “Psychology and the Internet”

2022–2024 Teaching Consultant – Center for Teaching and Learning

- Conduct in-class observations, mid-course reviews, and practice teaching sessions for graduate student instructors across the university
- Consult with graduate students on teaching materials and teaching statements for the academic job market

2022, Fall Teaching Assistant, Section Instructor – Research Methods: Social Cognition and Emotion

2022, Spring Teaching Assistant, Section Instructor – Research Methods: Social Cognition and Emotion

2021 Instructor, Summer Internship Program in Psychological Science

- Taught undergraduate students in R programming, the scientific method, and science communication

2021 Teaching Assistant, Section Instructor – Research Methods: Social/Personality

2020 Assistant Instructor – Columbia Psychology coding bootcamp

2020 Teaching Assistant, Guest Lecturer – Social Psychology

- Guest lecture: Attitudes and Consistency

2020 Teaching Assistant, Guest Lecturer – Thinking and Decision Making

- Guest lecture: The Cognitive Neuroscience of Decision Making

Mentored students

2023 Duygu Cakmur: Undergrad research assistant

2022 Brena Bessa: Post-bac research assistant

2022– Jessie Lin: Undergrad research assistant, summer research project

2021– Arielle Clark: Undergrad research assistant, senior honors thesis project

2021–2022 Jana Jaran: Undergrad research assistant, senior honors thesis project
 2021–2022 Monica Boose: Undergrad research assistant
 2021 Charlotte Cassidy: Post-bac research assistant, summer research project

GENERAL AUDIENCE PUBLICATIONS

“Facebook and campus mental health” *Center for Brain Mind and Society* (September 26, 2023)
 “Executive Functioning” *Center for Brain Mind and Society* (September 26, 2023)
 “Is mind reading possible?” *Muse Magazine* (September 2023 issue)
 “Something Magical” *Muse Magazine* (May/June 2023 issue)
 “Laura Lewis, PhD” *Scientist on the Subway* (April 10, 2023)
 “Sarah Woolley, Neuroscientist” *Muse Magazine* (November/December 2022 issue)
 “Dr. Uraina Clark” *Scientist on the Subway* (March 21, 2022)
 “Anita Burgos, PhD” *Scientist on the Subway* (September 13, 2021)
 “Shivon Robinson, PhD” *Scientist on the Subway* (November 30, 2020)

SERVICE AND OUTREACH EXPERIENCE

Volunteer peer reviewer: Autism Research, Social Cognitive and Affective Neuroscience
Society member: Social Affective Neuroscience Society, Society for Affective Science, Society for the Teaching of Psychology

2024 Mentor, BioBus

- Advised high school students on a science research project during weekly after-school sessions
- Provided guidance on research questions, procedures, data analysis, and presentations

2023 Instructor, Genspace

- Taught a two-day workshop for the general public entitled “Neurohacking 101: Analyzing and visualizing brain networks”

2023 Instructor, Double Discovery Center

- Created and taught a 7-week course on science communication for high school students in a college prep program

2022–2023 Coordinator, BraiNY Bunch

- Organized and facilitated a virtual journal club for high school and undergraduate students from around the world

2020–2022 Instructor, Brain Research Apprenticeships in New York at Columbia

- Taught neuroscience to high school students, helped build course curriculum, mentored students during summer internships
- Served as Senior Instructor 2021–2022

2020–2023 Writer/Outreach coordinator, Scientist on the Subway (SciSub)

- Interviewed neuroscientists from underrepresented backgrounds, write articles
- Developed curricula based on SciSub articles, coordinate partnerships with science education programs

2020–2022 Psychology Department Monday Seminar Coordinator

- Organized weekly seminar series for department with both external and internal speakers, as well as panels
- 2021–2023 Instructor, Summer Internship Program in Psychological Science
- Internship program for undergraduates to learn psychology research skills and complete an internship
 - Part of core team running the program; taught coding and professional development workshops
- 2021 Mentor, Mindhive
- Mentored high school students on citizen science projects
- 2020 Instructor, Columbia Volunteer Tutoring Corps Summer Camp
- Designed and taught course about the science of cooking to middle and high school students
- 2019 Instructor, Columbia University Neuroscience Outreach Multi-Visit Program
- Taught neuroscience to middle school students at Renaissance School of the Arts and helped them prepare for a final presentation
- 2018 Summer Program Co-Director, The Sackler Institute, Weill Cornell Medical College
- Assisted in creation and management of inaugural summer internship program for high school and college students
- 2017–2018 Instructor, Mad Science
- Performed and taught as a “Mad Scientist” for children’s birthday parties
- 2014–2017 Science Center Student Worker, Brown University
- Created, wrote, and hosted a web series about science research at Brown (<https://bit.ly/2Ozxdke>)
 - Coordinated “Science Underground” science café program
- 2015–2017 Brown Brain Bee High School Coordinator, Brown University
- Taught basic neuroscience to high school students, recruited high schools to participate, mentored other student teachers
- 2016–2017 Tour Program Co-Coordinator, Brown University
- Oversaw 100 tour guides, ran training sessions, gave tours and information sessions to visiting families
- 2015 Summer Intern, Liberty Science Center
- Led presentations on museum floor, assistant taught summer camps, explained exhibits to museum guests