

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.
- 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

- 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). How did the perceived morality of public figures change during #MeToo?

Silver, B.M., Yu, W., Davachi, L., Ochsner, K.N. (in prep). What are my friends really like? Motivated perceptions after completing a virtual escape room.

Published

Abstracts from the 2022 Annual Meeting of the Society for Affective Science. *Affect 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*. DOI: <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*. DOI: <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*. DOI: <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*. DOI: <https://doi-org.ezproxy.cul.columbia.edu/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*. DOI: <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*. DOI: <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*. DOI: <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*.

Preprint DOI: [10.31234/osf.io/faz45](https://doi.org/10.31234/osf.io/faz45)

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: 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

- 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

2022–2023	Teaching Consultant – Center for Teaching and Learning <ul style="list-style-type: none"> Observe and provide feedback to graduate students across the university about their teaching
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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Guest lecture: Attitudes and Consistency
2020	Teaching Assistant, Guest Lecturer – Thinking and Decision Making <ul style="list-style-type: none"> 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

“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

2023	Instructor, Genspace <ul style="list-style-type: none"> Taught a two–day workshop for the general public entitled “Neurohacking 101: Analyzing and visualizing brain networks”
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2023	<p>Instructor, Double Discovery Center</p> <ul style="list-style-type: none"> Created and taught a 7-week course on science communication for high school students in a college prep program
2022–2023	<p>Coordinator, BraiNY Bunch</p> <ul style="list-style-type: none"> Organize and facilitate a virtual journal club for high school and undergraduate students from around the world
2020–2022	<p>Instructor, Brain Research Apprenticeships in New York at Columbia</p> <ul style="list-style-type: none"> Taught neuroscience to high school students, helped build course curriculum, mentored students during summer internships Served as Senior Instructor 2021–2022
2020–2023	<p>Writer/Outreach coordinator, Scientist on the Subway (SciSub)</p> <ul style="list-style-type: none"> Interview neuroscientists from underrepresented backgrounds, write articles Develop curricula based on SciSub articles, coordinate partnerships with science education programs
2020–2022	<p>Psychology Department Monday Seminar Coordinator</p> <ul style="list-style-type: none"> Organized weekly seminar series for department with both external and internal speakers, as well as panels
2021–2023	<p>Organizer/Instructor, Summer Internship Program in Psychological Science</p> <ul style="list-style-type: none"> 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	<p>Mentor, Mindhive</p> <ul style="list-style-type: none"> Mentored high school students on citizen science projects
2020	<p>Instructor, Columbia Volunteer Tutoring Corps Summer Camp</p> <ul style="list-style-type: none"> Designed and taught course about the science of cooking to middle and high school students
2019	<p>Instructor, Columbia University Neuroscience Outreach Multi-Visit Program</p> <ul style="list-style-type: none"> Taught neuroscience to middle school students at Renaissance School of the Arts and helped them prepare for a final presentation
2018	<p>Summer Program Co-Director, The Sackler Institute, Weill Cornell Medical College</p> <ul style="list-style-type: none"> Assisted in creation and management of inaugural summer internship program for high school and college students
2017–2018	<p>Instructor, Mad Science</p> <ul style="list-style-type: none"> Performed and taught as a “Mad Scientist” for children’s birthday parties
2014–2017	<p>Science Center Student Worker, Brown University</p> <ul style="list-style-type: none"> Created, wrote, and hosted a web series about science research at Brown (https://bit.ly/2Ozxdke) Coordinated “Science Underground” science café program
2015–2017	<p>Brown Brain Bee High School Coordinator, Brown University</p>

- 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