

# 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

### *Research*

- 2024 Incite Doctoral Dissertation Grant
- 2024 Psychology Department Graduate Travel Award
- 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 Neurohackademy participant
- 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

### *Teaching/outreach*

- 2024 Columbia Graduate School of Arts and Sciences Teaching Scholars Fellowship
- 2023 APS Teaching Fund Small Grant
- 2023 POD Network GPPD Career Development Grant
- 2023 Fellowship, ComSciCon Flagship Workshop
- 2021 Teaching Observation Fellowship, Columbia University
- 2020 Lead Teaching Fellowship, Columbia University

## 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.**, 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 revisions). Changes in self-views in response to the 2020 U.S. presidential election. <https://doi.org/10.31234/osf.io/pq4k5>

### *Published*

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

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](https://doi.org/10.1016/j.neuroimage.2019.01.016)

## **PRESENTATIONS**

### *Talks and workshops*

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|------|--|
| 2024 | Panelist, Zuckerman Institute Neuroethics Teacher Institute  |
| 2024 | Invited guest speaker, Social Learning and Choice Lab (Leor Hackel) lab meeting  |
| 2024 | Co-facilitator, Teaching observation workshop, Center for Teaching and Learning  |
| 2022 | Silver, B.M., Ochsner, K.N. <i>Morality and #MeToo: Motivated impression updating on Twitter</i> . Flash talk presented at the Society for Affective Science; Online. <ul style="list-style-type: none"><li>• Denoted as “High-ranking abstract”; invited to submit abstract as conference publication</li></ul> |
| 2020 | Silver, B.M., Li, D.H., Mayers, A., Croxson, P.L. <i>Neuroscience education from home: Challenges and opportunities</i> . Interactive talk presented at the Neuromatch conference; Online.   |
| 2017 | Silver, B.M. <i>The relationship between pretend play and working memory in preschool aged children</i> ; Oral undergraduate honors thesis presentation; Providence, RI.   |

### *Posters: First author*

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|------|--|
| 2024 | Silver, B.M., Baldassano, C., Davachi, L., Ochsner, K.N. <i>Always on my mind: The role of the dmPFC in responding to social feedback from potential romantic partners</i> . Poster presented at the Social and Affective Neuroscience Society. Toronto, CA. |
| 2024 | Silver, B.M., Corbani, F., Muskin, P.R., Davachi, L., Ochsner, K.N. <i>You are</i>   |

*enjoying this poster: Investigating hypnosis as a tool for emotion regulation during fMRI.* Poster presented at the Society for Affective Science. New Orleans, LA.

- 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.
- 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.

*Posters: 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

### *Undergraduate courses*

- 2024, Fall Instructor of record, course developer – Psychology and the Internet
- 2024, Spring Teaching assistant, guest lecturer – Social Neuroscience
- Guest lecture: Social neuroscience and social media
- 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, Spring Teaching assistant, section instructor – Research Methods: Social/Personality

2020, Summer Teaching assistant, guest lecturer – Social Psychology

- Guest lecture: Attitudes and Consistency

2020, Spring Teaching assistant, guest lecturer – Thinking and Decision Making

- Guest lecture: The Cognitive Neuroscience of Decision Making

## Other

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

2021 Instructor, Summer Internship Program in Psychological Science

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

2020 Assistant Instructor – Columbia Psychology coding bootcamp

## Mentored students

2021–2024 Arielle Clark: Senior honors thesis project, undergrad research assistant

2022–2023 Jessie Lin: Undergrad research assistant, summer research project

2023 Duygu Cakmur: Undergrad research assistant

2022 Brena Bessa: Post-bac research assistant

2021–2022 Jana Jaran: Senior honors thesis project, undergrad research assistant

2021–2022 Monica Boose: Undergrad research assistant

2021 Charlotte Cassidy: Post-bac research assistant, summer research project

## GENERAL AUDIENCE PUBLICATIONS

“Elodie Freyman, Primatologist” *Muse Magazine* (April 2024 issue)

“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

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| 2024      | Mentor, BioBus <ul style="list-style-type: none"><li>• Advised high school students on a science research project during weekly after-school sessions</li><li>• Provided guidance on research questions, procedures, data analysis, and presentations</li></ul>   |
| 2023      | Instructor, Genspace <ul style="list-style-type: none"><li>• Taught a two-day workshop for the general public entitled “Neurohacking 101: Analyzing and visualizing brain networks”</li></ul>   |
| 2023      | Instructor, Double Discovery Center <ul style="list-style-type: none"><li>• Created and taught a 7-week course on science communication for high school students in a college prep program</li></ul>  |
| 2022–2023 | Coordinator, BraiNY Bunch <ul style="list-style-type: none"><li>• Organized and facilitated a virtual journal club for high school and undergraduate students from around the world</li></ul>   |
| 2020–2022 | Instructor, Brain Research Apprenticeships in New York at Columbia <ul style="list-style-type: none"><li>• Taught neuroscience to high school students, helped build course curriculum, mentored students during summer internships</li><li>• Served as Senior Instructor 2021–2022</li></ul>                               |
| 2020–2023 | Writer/Outreach coordinator, Scientist on the Subway (SciSub) <ul style="list-style-type: none"><li>• Interviewed neuroscientists from underrepresented backgrounds, write articles</li><li>• Developed curricula based on SciSub articles, coordinate partnerships with science education programs</li></ul>               |
| 2020–2022 | Psychology Department Monday Seminar Coordinator <ul style="list-style-type: none"><li>• Organized weekly seminar series for department with both external and internal speakers, as well as panels</li></ul>   |
| 2021–2023 | Instructor, Summer Internship Program in Psychological Science <ul style="list-style-type: none"><li>• Internship program for undergraduates to learn psychology research skills and complete an internship</li><li>• Part of core team running the program; taught coding and professional development workshops</li></ul> |
| 2021      | Mentor, Mindhive <ul style="list-style-type: none"><li>• Mentored high school students on citizen science projects</li></ul>  |
| 2019      | Instructor, Columbia University Neuroscience Outreach Multi-Visit Program <ul style="list-style-type: none"><li>• Taught neuroscience to middle school students at Renaissance School of the Arts and helped them prepare for a final presentation</li></ul>  |
| 2017–2018 | Instructor, Mad Science <ul style="list-style-type: none"><li>• Performed and taught as a “Mad Scientist” for children’s birthday parties</li></ul>   |

- 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