

Remembering Sarah DuBrow across All Contexts

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This special issue contains numerous articles related to and inspired by Sarah's achievements as a scientist from her colleagues, collaborators, and friends. However, something that is difficult to convey through research articles is the person behind the science and the multitude of ways that she impacted our lives. We were Sarah's labmates, officemates, and friends through graduate school, postdoctoral training, and beyond. Although the articles in this issue demonstrate the lasting mark that Sarah has had on the field, we hope to convey her impact on us, within and outside of the laboratory, and to every life she touched.

Sarah's obsession with science was unrelenting, and she forcefully wielded her curiosity and creativity to expand our understanding of the mind. Sarah explored beyond the current zeitgeist of science to unearth forgotten gems, allowing a broad set of theories to enrich her own. She was the real deal. If you made it known that you had some fresh new pilot data, her chair would be rolling over to your desk before you could even debug the final line of analysis code. If she watched you present at a seminar or laboratory meeting, you could count on her hanging around long after the Q&A section ended, peppering you with questions about what might be giving rise to a puzzling data point. In the era of remote presentations, there was no need to even wait until the end of the presentation; you would immediately find a string of messages from her, with an alternative hypothesis and several analyses that would test it. Most of the time, her suggestions were more thoughtful and better matched to the data than your own ideas.

Sarah's wildly imaginative side flowed directly into her personal life. She had a fondness for fantasy and science fiction books and TV shows, especially stories that built new worlds with strong female characters. Above all, she loved to discuss plot elements and character development—whether in book club, or over lunch, or late at night after watching the newest episode. Like science, she wanted to know "why." Why would this far-future race of aliens organize their government to prioritize conquest over exploration? Why would Walder Frey align with the Starks unless he had an ulterior motive? Sarah's intense gaze and excited smile would be a cue to stop what you are doing and join her in making predictions of what could come next.

Sarah's curiosity was matched by her persistent discernment of what was important. In the laboratory, she prioritized the question above all. We watched her mull over the design of a new experiment, characterized by bursts of creative ideas and strict evaluation of each against the overarching scientific goal. She integrated a combination of ideas from disparate fields (priming, event boundaries, episodic memory) and methods (neuroimaging and neuropsychological data). This process was at work in her foundational contribution to the Ezzyat-Dubrow-Davachi task, specifically her modification to test temporal memory (Figure 1). She further highlighted encoding stability and intervening item reactivation to delineate contextual boundaries and organize memories (Sherman, DuBrow, Winawer, & Davachi, 2023; Clewett, DuBrow, & Davachi, 2019; DuBrow, Rouhani, Niv, & Norman, 2017; Davachi & DuBrow, 2015; DuBrow & Davachi, 2013, 2014). Despite her sophistication with a range of methodological tools, she was not merely tempted by trendy new methods or approaches. All analyses, follow-up experiments, and collaborations were dreamed up in ruthless pursuit of her questions.

Inside the laboratory, Sarah was also interested in how agency over our experiences can shape memories. Her collaborations on this topic addressed the cognitive factors and the mechanisms by which the mesolimbic system ties together choice, personal preference, and episodic memory (DuBrow, Eberts, & Murty, 2019; Murty, DuBrow, & Davachi, 2015). Outside of the laboratory, Sarah exercised her agency to optimize choice, particularly when it came to food and drink, to create memorable experiences for all of us. She was a key organizer and decision-maker for social events, ranging from casual after-work hang outs to planning full menus for trips (not to mention excursions to the medieval/renaissance era). Sarah had discerning and ambitious taste, carefully seeking out recipes and unusual sources of food (chicken feet skewers, grilling octopus on the 4th of July, smuggling raw milk across state lines). We could always trust Sarah to know what we would like best.

Sarah further used her agency to advocate for others. She was keenly aware of the dynamics and privileges of any community she was part of and spoke up for those who were more timid. Like one of her favorite characters, Arya Stark, Sarah had a strong sense of justice and resolve to confront harmful power structures. Catching every nuance, she noticed and directly addressed such conflict in our everyday lives, particularly on behalf of others. If you needed support, she was 10 steps ahead, already having noticed the situation that could be ailing you, offering her ear (and beer) to commiserate and concoct a plan of action. Overall, Sarah fostered the social health of her

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Figure 1. Temporal order memory for events in Sarah's life. (A) Encoding: Sarah's academic and personal journey, represented as the trajectory of places where she researched (Stanford University, New York University, and Princeton University) and lived, culminating in the University of Oregon, where Sarah began her laboratory in 2018. Importantly, she adopted two beloved (dog) children, Marlon (left) and Maisie (right), a very good boy and girl. The task for place images is to report "how stimulating?," and the task for dog images is to report "how good?". Changes in category and task represent a context shift or "event boundary." (B) Retrieval: The consequence of event boundaries in memory is then probed at retrieval, when people are asked to report which image appeared more



recently. Accuracy (i.e., correct identification of the more recent image) is higher for items separated by the same category of intervening pictures (i.e., "No Switch") versus items that crossed a context switch (i.e., "Switch," places separated by intervening dogs). This body of work delineates the cognitive and neural mechanisms giving rise to the temporal organization of memory (DuBrow & Davachi, 2013, 2014).

communities by supporting her friends and colleagues through difficult situations.

Logistical obstacles were moreover ignored when it came to connecting with friends and family. She was always ready to devise elaborate travel plans to maintain friendships across distances. If not for Sarah, we would not have embarked on an 11-hr train ride through the Pennsylvania mountains, "glamped" on a borrowed mattress under a clear Oregon sky, found a hidden rave in an Orthodox synagogue in Detroit, nor witnessed bioluminescence on the beach of the Outer Banks of North Carolina with lightning overhead (after a 6-hr drive during which a dog barfed up a sock into the open palms of her passenger), among the countless adventures and memories she gave us.

We hope that as you have absorbed this narrative of Sarah's impact on us, you are convinced that Sarah's brilliance, creativity, and her relentless pursuit of what is important can be seen across the boundary of work and life. Although theory would predict that event boundaries between work and life are strongly segmented, this was ironically not the case for Sarah. What we loved most about her shone through in every moment, so it is no surprise that we find ourselves missing her at every conference, when adventuring on our own with fall leaves underfoot and blue skies overhead, or when confronted with a particularly detailed restaurant menu. As you read this special issue, we hope you take note of the legacy she has left behind in her science and on us, the scientists who now frequently ask themselves: "How would Sarah think of this?" Corresponding author: Nina Rouhani, California Institute of Technology, 1200 East California Blvd, Pasadena, CA 91125, or via e-mail: ninarouhani@gmail.com.

Diversity in Citation Practices

Retrospective analysis of the citations in every article published in this journal from 2010 to 2021 reveals a persistent pattern of gender imbalance: Although the proportions of authorship teams (categorized by estimated gender identification of first author/last author) publishing in the *Journal of Cognitive Neuroscience (JoCN)* during this period were M(an)/M = .407, W(oman)/M = .32, M/W = .115, and W/W = .159, the comparable proportions for the articles that these authorship teams cited were M/M = .549, W/M = .257, M/W = .109, and W/W = .085 (Postle and Fulvio, *JoCN*, 34:1, pp. 1–3). Consequently, *JoCN* encourages all authors to consider gender balance explicitly when selecting which articles to cite and gives them the opportunity to report their article's gender citation balance.

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