# Jamal R Williams

#### **Curriculum Vitae**

**P**: 858 319 1417

E: jamal.williams@yale.edu

L: 100 College St., New Haven, CT 06510

#### **Education**

2024 - present	<b>Postdoctoral Associate</b> Advisor - Dr. Anna "Kia" Nobre	Yale University
2018 - 2024	PhD, Experimental Psychology Advisors - Drs. Tim Brady & Viola Störmer	UC San Diego
2020	<b>MA, Experimental Psychology</b> Advisors - Drs. Tim Brady & Viola Störmer	UC San Diego
2016 - 2018	BS, Cognitive and Behavioral Neuroscience magna cum laude	UC San Diego

#### Awards

2020 - 2024	National Science Foundation Graduate Research Fellowship (NSF GRFP; 3 year tenure)
2019	Norman Henry Anderson Research Fellowship
2018 / 2021	Eugene Cota-Robles Fellowship ( 2 year tenure )
2018	Norman Henry Anderson Distinguished Undergraduate Scholar
2017	SACNAS Travel Award
2017	Berkeley McNair Symposium Travel Award
2017 - 2018	Town & Gown Scholarship
2017	Irvine Memorial STEM Scholarship
2016 - 2017	McNair Research Scholarship
2016	START Research Scholarship
2016 - 2018	CAL, Pell, & UC San Diego Grants ( "full ride" Undergraduate Scholarships )

#### Articles

2024 Robinson, M. M., Williams, J. R., Wixted, J.T., & Brady, T. – Zooming in on what counts as core and auxiliary: A case study on recognition models of visual working-memory. Psychonomic Bulletin & Review

2024	Williams, J. R., & Störmer, V. S. — Cutting through the noise: Auditory scenes and their effects on visual object processing. <i>Psychological Science</i>
2024	Brady, T. F., Robinson, M. M., <b>Williams, J. R</b> . Noisy and hierarchical visual memory across time scales. Nature Reviews Psychology
2023	Brady, T. F., Robinson, M. M., <b>Williams, J. R.,</b> & Wixted, J. (2023). Measuring memory is harder than you think: A crisis of measurement in memory research. <i>Psychonomic Bulletin</i> & <i>Review</i>
2023	Williams, J. R., Robinson, M. M., & Brady, T. F. (2023). There is no theory-free measure of "swaps" in visual working memory experiments. <i>Computational Brain and Behavior</i>
2022	Williams, J. R., Markov, Y., Tiurina, N., & Störmer, V. S. (2022) What you hear is what you see: Sounds alter the contents of visual perception. <i>Psychological Science</i>
2022	Williams, J. R., Robinson, M. M., Schurgin, M. W., Wixted, J., & Brady, T. F. (2022). You cannot "count" how many items people remember in working memory: The importance of signal detection-based measures for understanding change detection performance. <i>Journal of Experimental Psychology: Human Perception and Performance</i>
2022	<b>Williams, J. R.,</b> Brady, T. F., & Störmer, V. S. (2022). Guidance of Attention by Working Memory Is a Matter of Representational Fidelity. <i>Journal of Experimental Psychology:</i> <i>Human Perception and Performance</i>
2021	Williams, J. R., & Störmer, V. S. (2022). Working Memory: How much of it is used in natural behavior? Current Biology. <i>Commentary</i>

#### **Book Chapters**

Brady, T.F., Störmer, V.S., Shafer-Skelton, A., Williams, J.R., Chapman, A.F., & M. Schill, H.
(2019). Scaling up visual attention and visual working memory to the real world. *Psychology of Learning and Motivation - Advances in Research and Theory*, 70, 29–69.

### **Invited Talks**

2024	Precise memory and imprecise guidance: How representational fidelity shapes attentional guidance. Invited talk, presented virtually at the Psychology Department Colloquia, Vrije Universiteit, Amsterdam, NL
2023	Auditory context and visual perception. Invited talk, presented to the Denison Lab at Boston University, Boston MA
2022	Audition and Vision: how auditory information perturbs visual processing. Invited talk presented virtually at the CUNY Cognitive Science Speaker Series

#### Presentations

2024	Williams, J. R. & Brady T.F.— Recognition does not induce the forgetting of similar objects. Talk presented at the 65th annual <i>Psychonomic Society</i> , New York, NY
2024	<b>Williams, J. R.</b> & Brady T.F.— Forgetting in long-term memory: Recognition does not induce the forgetting of similar objects. Poster presented at the 24th annual <i>Vision Sciences Society,</i> St. Pete Beach, FL
2023	<b>Williams, J. R.,</b> Brady T.F., & Störmer, V.S. – Precise memories and imprecise guidance: Why attention is guided towards colors I'm certain I didn't see. Talk presented at the 23rd annual <i>Vision Sciences Society,</i> St. Pete Beach, FL
2022	<b>Williams, J. R.,</b> Schurgin, M., & Brady, T. F.— Does recognition induce forgetting? Poster presented at the <i>Object Perception Attention and Memory (OPAM) Conference</i> , Boston, MA
2022	<b>Williams, J. R.,</b> Robinson, M. M., Schurgin, M., Wixted, J., & Brady, T. F. — You can't "count" the number of items in visual working memory. Talk presented virtually at the Visual Working Memory Symposium
2022	Robinson, M. M., <b>Williams, J. R.,</b> & Brady, T. — Evaluating models of visual working memory in change detection: Discrete-slots or non-diagnostic data? Posted presented at the 22nd annual <i>Vision Sciences Society,</i> St. Pete Beach, FL
2022	<b>Williams, J. R.,</b> Robinson, M. M., Schurgin, M. W., Wixted, J., & Brady, T. F. – You can't "count" how many items people remember in working memory: The importance of signal detection- based measures for understanding change detection performance. Posted presented at the 22nd annual <i>Vision Sciences Society</i> , St. Pete Beach, FL
2021	Williams, J. R., Markov, Y., Tiurina, N., & Störmer, V. S. — Auditory context alters visual perception. Talk presented virtually at the 21st annual <i>Vision Sciences Society</i> .
2020	Williams, J. R., Brady T. F., & Störmer, V. S. — Natural variation between multiple working memory items causes only one item to guide attention. Talk presented virtually at the Visual Working Memory Symposium
2020	<b>Williams, J. R.,</b> Brady T. F., & Störmer, V. S. — Natural variation in the representational fidelity between multiple working memory items can explain which item guides attention. Poster presented at the 20th annual meeting of the <i>Vision Sciences Society</i> , St. Pete Beach, FL
2019	<b>Williams, J. R.</b> & Störmer, V. S. – Auditory information facilitates sensory evidence accumulation during visual object recognition. Poster presented at the 19th annual meeting of the <i>Vision Sciences Society</i> , St. Pete Beach, FL
2018	<b>Williams, J. R.</b> , Brady T. F., & Störmer, V. S. — Multiple visual working memory items can guide attention and facilitate perceptual processing. Poster presented at the Society for Neuroscience, San Diego, CA

2018	<b>Williams, J. R.</b> , Brady T. F., & Störmer, V. S. – Multiple visual working memory items can guide attention and facilitate perceptual processing; Poster presented at the 18th annual meeting of the Vision Sciences Society, St. Pete Beach, FL
2017	Williams, J. R., Brady T. F., & Störmer, V. S. — Surround Suppression in Working Memory; Poster presented at the 44th annual <i>SACNAS conference</i> , Salt Lake City, UT
2017	Williams, J. R., Brady T. F., & Störmer, V. S. – attentional guidance from single and multiple working memory items. Talk presented at the annual McNair Scholars Symposium, Berkeley, CA
2017	Williams, J. R., Brady T. F., & Störmer, V. S. — Attentional Guidance Is Disrupted by Multiple Working Memory Items. Talk presented at the <i>Summer Research Conference</i> , San Diego, CA
2017	Williams, J. R., Brady T. F., & Störmer, V. S. — Center-Surround Inhibition in Working Memory. Poster presented at the annual meeting of the <i>Faculty Mentor Program</i> , San Diego, CA

### Service & Invited Panels

2023	<b>Panelist — Psi Beta Day:</b> Information session for undergraduates transferring to UC San Diego Psychology (UC San Diego, La Jolla, CA)
2022	<b>Panelist — Diversify Psychology:</b> Designed to give URM and non-traditional students support and insight on a career in psychological research ( <i>Virtual</i> )
2021	Panelist — Pathways to PhDs: Panel and break out groups focused on graduate studies in Psychology ( <i>Virtual</i> )
2020	Panelist — Pathways to PhDs (Virtual)
2018	Guest Speaker — Town & Gown Symposium: As a scholarship recipient, I gave a talk aimed at demonstrating the benefits of continued support for STEM students ( <i>La Jolla, CA</i> )
2018	Guest Speaker — Undergraduate and Graduate Study: What Comes After High School?: Spoke about my path from community college to PhD for high school students interested in higher education and research (UC San Diego, La Jolla, CA)
2018	Coordinator — Summer Research Program Orientation (UC San Diego, La Jolla, CA)
2018	Panelist —Getting in: How I Just Got Into Grad School (and So Can You!) (UC San Diego, La Jolla, CA)
2017 - 2021	<b>Contributor — Ronald E. McNair and Academic Enrichment Program Student Board</b> (UC San Diego, La Jolla, CA)
2016 - 2019	Contributor — START Program Planning Board (UC San Diego, La Jolla, CA)

## Teaching & Mentorship

2022	Laurie, Nathalie	STARS (Visiting Undergraduate)
2021	Li, Manzhi (Krypton)	UC San Diego Undergraduate
2021	Choksi, Roshni	STARS (Visiting Undergraduate)
2021	Teaching Assistant & Guest Lecturer	Behavioral Neuroscience Lecture — Memory: From Molecules to Meaning
2020	Teaching Assistant	Behavioral Neuroscience
2019-20	Pickell, Delaney	UC San Diego Undergraduate
2019-20	Deng, Yufei	UC San Diego Undergraduate
2019	Flores, Hortensia	ENLACE (Visiting Undergraduate)
2019	Teaching Assistant & Guest Lecturer	Visual Cognition Lecture — Visual Long-Term Memory
2018-20	Quynh, Avery	UC San Diego Undergraduate
2018-20	Ricketts, Lulu	UC San Diego Undergraduate
2018	Teaching Assistant & Guest Lecturer	General Psychology: Cognitive Foundations Lecture – Long-Term Memory & Forgetting
2017	Brooks, Trenton	STARS (Visiting Undergraduate)
2017	Gonzalez, Celene	STARS (Visiting Undergraduate)

#### Reviewing

Behavioral Research Methods — Cognitive Science Society — iScience — Journal of Experimental Psychology: Learning, Memory, and Cognition — Journal of Vision — Memory & Cognition — PLOS One — Psychonomic Bulletin & Review — Royal Society Open Science — Scientific Reports

#### **Undergraduate Positions**

2017 - 2018

McNair Scholar (Junior Researcher)

UC San Diego

As part of the McNair program I designed and executed a project which focused on the mechanisms of visual working memory. Specifically, we asked if surround suppression is present in working memory and if so, how precisely is it maintained. The summer allowed for a full time focus on progressing the project and experimental programming and data analysis with MATLAB.

Advisors – Drs. Timothy Brady & Viola Störmer

#### 2016 - 2017 Volunteer Research Assistant

Social cognition & perception projects focusing on the types of social cues that alter perception & memory. Responsible for stimuli manipulation, participant running, and response coding.

Advisors – Drew Walker, Kristin Donnelly, & Dr. Edward Vul

#### 2016 START Fellow (Young Investigator)

UC San Diego Designed and executed a research project which elucidated the relationship between NPAS4 promoter concentrations and neuronal activity. Gained experience in experimental design, research presentation, single cell recordings, dissections, QPCR procedure and analysis, and UNIX.

Advisors – Drs. Michael Baker & Eduardo Macagno