Curriculum Vitae

Anastasia Kiyonaga

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Appointments

University of California, San Diego 2020-
Assistant Professor, Cognitive Science
Affiliated Faculty: Neuroscience Graduate Program; Kavli Institute for Brain and Mind, Institute for Neural Computation

University of California, Berkeley 2015-2019
Postdoctoral Fellow, Helen Wills Neuroscience Institute
Advisor: Mark D'Esposito

Education

Duke University 2010-2015
Ph.D., Psychology & Neuroscience
Advisor: Tobias Egner

University of Pennsylvania 2007-2009
M.S.Ed., Human Development

University of Virginia 1999-2003
B.A., Major in Psychology, Minor in Religious Studies

Extramural Funding

Pupillary working memory for adaptive perception
National Institutes of Health 1R01EY036843-01, total costs: $2,364,336 2025-2029
Role: PI

Sensory, cognitive, and transcranial neuromodulation of goal representations
Air Force Office of Scientific Research FA9550-22-1-0230, total costs: $485,932 2022-2026
Role: PI

Network properties and causal mechanisms of distractor-resistant working memory (completed) 2016-2019
NIMH F32MH111204, total costs: $175,000
Role: PI

Competitive Internal funding

What are thoughts made of? Dusting for neural fingerprints of internal representations using phenomenology and information-based neuroimaging
Kavli Institute for Brain and Mind Innovative Research Grants: $50,000 2022-2023
Role: Co-I (with Lera Boroditsky, Seana Coulson, and PI Ana Chkhaidze)

Faculty Career Development Program: $17,000 2022-2023

Publications

* = shared authorship; My Google Scholar and ORCID ID: https://orcid.org/0000-0002-7586-3447

Preprints & under review

1. Ballard I, Gaspariani L, Piriyajitakonkij M & Pappas I, & **Kiyonaga A.** Competition during working memory enhances long-term memory. *PsyArXiv*. DOI: 10.31234/osf.io/68q2n_v2
2. Dong Y, Hung Y, Gaspariani L & **Kiyonaga A**. Gaze reinstatement during working memory for natural scenes. *bioRxiv*. DOI: 10.1101/2025.09.29.678115v2
3. Chkhaidze A, Gaspariani L, Ballard I & **Kiyonaga A.** Visual and verbal thought tendencies shape working memory under distraction. *PsyArXiv*. DOI: 10.31234/osf.io/k2che_v1
4. **Kiyonaga A** & D'Esposito M. A beginner's guide to working memory. *PsyArXiv*. DOI: 10.31234/osf.io/kby4n_v1
5. **Kiyonaga A,** Miller JA & D'Esposito M. Lateral prefrontal cortex controls interplay between working memory and actions. *bioRxiv*. DOI: 10.1101/2024.09.17.613601v1
6. Tambini A, Miller JA, Ehlert L, **Kiyonaga A,** & D'Esposito M. Structured memory representations develop at multiple time scales in hippocampal-cortical networks. *bioRxiv*. DOI: 10.1101/2023.04.06.535935
7. **Kiyonaga A*,** Scimeca JM*, & D'Esposito M (accepted in principle). Dissociating the causal roles of frontal and parietal cortex in working memory capacity. *Nature Human Behaviour*.
   This is a Registered Report that has been approved after Stage 1 peer-review. DOI: 10.6084/m9.figshare.7145873.v1

Peer-reviewed journal articles

1. Yang S, Dong Y, & **Kiyonaga A** (*in press*). Flexible Working Memory in the Human Peripheral Nervous System. *Current Biology*.
   bioRxiv preprint. DOI: 10.1101/2025.09.26.678884
2. Dong Y, Hung Y, Xie C, & **Kiyonaga A** (*2026*). Windows to the goal: Pupillary working memory signatures prospectively adapt to task demands. *iScience, 29*(*6*), 115920. DOI: 10.1016/j.isci.2026.115920
3. Chkhaidze A, Reeder RR, Gag C, **Kiyonaga A** & Coulson S (2026). From dots to faces: Individual differences in visual imagery capacity predict the content of Ganzflicker-induced hallucination. *Neuroscience of Consciousness*, *2026*(1), niag016. DOI: 10.1093/nc/niag016
4. **Kiyonaga A** & Serences JT (2025)^. Sensory reformatting for a working visual memory. *Trends in Cognitive Sciences, 29*(*12*), 1120-1135. DOI: 10.1016/j.tics.2025.09.006
   ^Cover Article
5. Adam K, Klatt LI, Miller J, Rösner M, Fukuda K, & **Kiyonaga A** (2025). Beyond routine maintenance: Current trends in working memory research. *Journal of Cognitive Neuroscience, 37,* 1035-1052. DOI: 10.1162/jocn_a_02298
6. Dong Y & **Kiyonaga A** (2024). Ocular working memory signals are flexible to behavioral priority and subjective imagery strength. *Journal of Neurophysiology, 132,* 162-176. DOI: 10.1152/jn.00446.2023
7. Miller JA, Tambini A, **Kiyonaga A,** & D'Esposito M (2022). Long-term learning transforms prefrontal cortex selectivity during working memory. *Neuron, 110*(*22*), 3805-3819. DOI: 10.1016/j.neuron.2022.09.019
   Commentary: Ren, Konrad, Wagner, & Dresler (2023). Mnemonic training contextualizes working memory with long-term memory representations, *European Journal of Neuroscience, 57,* 1639–1641.
8. **Kiyonaga A**, Powers J, Chiu YC, & Egner T (2021). Hemisphere-specific parietal contributions to the interplay between working memory and attention. *Journal of Cognitive Neuroscience, 33,* 1428-1441. DOI: 10.1162/jocn_a_01740
9. Miller JA*, **Kiyonaga A***, Ivry RB, & D'Esposito M (2020). Prioritized verbal working memory content biases ongoing action. *Journal of Experimental Psychology: Human Perception and Performance, 46,* 1443–1457. DOI: 10.1037/xhp0000868

10. **Kiyonaga A** & Scimeca JM (2019). Practical considerations for navigating Registered Reports. *Trends in Neurosciences, 42,* 568-572. DOI: 10.1016/j.tins.2019.07.003
11. **Kiyonaga A***, Dowd EW*, & Egner T (2017). Neural representation of working memory content is modulated by visual attentional demand. *Journal of Cognitive Neuroscience, 29,* 2011-2024. DOI: 10.1162/jocn_a_01174
12. **Kiyonaga A,** Scimeca JM, Bliss DP, & Whitney D (2017). Serial dependence across perception, attention, and memory. *Trends in Cognitive Sciences, 21,* 493-497. DOI: 10.1016/j.tics.2017.04.011
    Commentary: Dyson (2017). Serial dependence in audition: Free, fast, and featureless? *Trends in Cognitive Sciences, 21,* 819-820.
13. **Kiyonaga A** & Egner T (2016). Center-surround inhibition in working memory. *Current Biology, 26,* 64-68. DOI: 10.1016/j.cub.2015.11.013
14. Coutlee, CG, **Kiyonaga A,** Korb FM, Huettel, SA, & Egner T (2016). Reduced risk-taking following disruption of the intraparietal sulcus. *Frontiers in Neuroscience, 10,* 588. DOI: 10.3389/fnins.2016.00588
15. Dowd EW, **Kiyonaga A,** Beck J, & Egner T (2015). Quality and accessibility of visual working memory during cognitive control of attentional guidance: A Bayesian model comparison approach. *Visual Cognition, 23,* 337- 356. DOI: 10.1080/13506285.2014.1003631
16. Dowd EW, **Kiyonaga A,** Egner T, & Mitroff S. (2015). Attentional guidance by working memory differs by paradigm: An individual-differences approach. *Attention, Perception, & Psychophysics, 77,* 704-712. DOI: 10.3758/s13414-015-0847-z
17. **Kiyonaga A** & Egner T (2014). The working memory Stroop effect: When internal representations clash with external stimuli. *Psychological Science, 25,* 1619-1629. DOI: 10.1177/0956797614536739
18. **Kiyonaga A,** Korb F, Lucas J, Soto D, & Egner T (2014). Dissociable causal roles for left and right parietal cortex in controlling attentional biases from working memory. *NeuroImage, 100,* 200-205. DOI: 10.1016/j.neuroimage.2014.06.019
19. **Kiyonaga A** & Egner T (2014). Resource-sharing between internal maintenance and external selection modulates attentional capture by working memory content. *Frontiers in Human Neuroscience, 8,* 670. DOI: 10.3389/fnhum.2014.00670
20. **Kiyonaga A,** & Egner T (2013). Working memory as internal attention: Toward an integrative account of internal and external selection processes. *Psychonomic Bulletin & Review, 20,* 228-242. DOI: 10.3758/s13423-012-0359-y
21. Soto D, Greene C, **Kiyonaga A,** Rosenthal C, & Egner T (2012). A parieto-medial temporal pathway for the strategic control over working memory biases in human visual attention. *Journal of Neuroscience, 32,* 17563-17571. DOI: 10.1523/JNEUROSCI.2647-12.2012
22. **Kiyonaga A,** Egner T, & Soto D (2012). Cognitive control over working memory biases of selection. *Psychonomic Bulletin & Review, 19,* 639-646. DOI: 10.3758/s13423-012-0253-7
23. Stanley EA, **Kiyonaga A,** Schaldach JM, & Jha AP (2011) Mindfulness-based mind fitness: A case study of a high stress pre-deployment military cohort. *Cognitive and Behavioral Practice, 18,* 566-576. DOI: 10.1016/j.cbpra.2010.08.002
24. Baijal S, Jha AP, **Kiyonaga A,** Singh R & Srinivasan N (2011). The influence of concentrative meditation training on the development of attention networks during early adolescence. *Frontiers in Psychology, 2,* 153. DOI: 10.3389/fpsyg.2011.00153
25. Jha AP, Stanley EA, **Kiyonaga A,** Wong LM, & Gelfand L (2010). Examining the protective effects of mindfulness training on working memory capacity and affective experience. *Emotion, 10,* 54-64. DOI: 10.1037/a0018438
26. Jha AP & **Kiyonaga A** (2010). Working memory-triggered dynamic adjustments in cognitive control. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 36,* 1036-1042. DOI: 10.1037/a0019337

Refereed conference papers

1. Ying Z, Callaway F, Fox R, **Kiyonaga A** & Mattar MG (2025). A Variational Neural Network Model of Resource-Rational Reward Encoding in Human Planning. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (Vol. 47). link: https://escholarship.org/uc/item/1jh635fd
2. Chkhaidze A, **Kiyonaga A**, Coulson S & Reeder RR (2025). Visual Imagery Vividness Predicts the Complexity of Induced Hallucinations. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (Vol. 47). link: https://escholarship.org/uc/item/1dx3n6gp
3. Ying Z, Callaway F, **Kiyonaga A**, & Mattar MG (2024). Resource-Rational Encoding of Reward Information in Planning. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (Vol. 46). link: https://escholarship.org/uc/item/8sb1c95h
4. Chkhaidze A, Coulson S, & **Kiyonaga A** (2023). Individual Differences in Preferred Thought Formats Predict Features of Narrative Recall. *Proceedings of the Annual Meeting of the Cognitive Science Society, 45*. link: https://escholarship.org/uc/item/0jm2d2rm
5. Dowd EW, **Kiyonaga A**, Beck JM, & Egner T (2014). Probability of guessing, not precision, changes in mixture models of visual working memory during cognitive control of attentional guidance. Summary published in Object Perception, Attention, and Memory (OPAM) 2014 Conference Report, Visual Cognition, 22(8), 1027-1030. DOI: 10.1080/13506285.2014.960669

Invited Chapters & Commentaries

1. **Kiyonaga A** (*in press*). Evaluating the relationship between working memory and attention. In D'Esposito, M (Ed.). *The Neural Architecture of Working Memory*. New York: Oxford University Press.
2. Yang S, **Kiyonaga A** (2024). Serial Dependence: Connecting past and present. *eLife* 13:e101212. DOI: 10.7554/eLife.101212
3. **Kiyonaga A** & D'Esposito M (2020). Competition and control during working memory. In James T. Enns and M. M. Chun (eds.), *Elements in Perception.* Cambridge: Cambridge University Press. DOI: 10.1017/9781108581073
4. **Kiyonaga A** (2019). We need a taxonomy of working memory. *Journal of Cognition, 2*(1), 35. DOI: 10.5334/joc.71
   Response: Oberauer, K. (2019). Working Memory and Attention – Response to Commentaries. *Journal of Cognition, 2*(1), 30.
5. Scimeca JM, **Kiyonaga A,** & D'Esposito M (2018). Reaffirming the sensory recruitment account of working memory. *Trends in Cognitive Sciences, 22,* 190-192. DOI: 10.1016/j.tics.2017.12.007
   Response: Xu, Y. (2018). Sensory Cortex Is Nonessential in Working Memory Storage. *Trends in Cognitive Sciences*, 22(3), 192-193.

Professional Activities

Society memberships

Cognitive Neuroscience Society ● Society for Neuroscience ● Vision Sciences Society

Society service

Cognitive Neuroscience Society, *Poster Committee*

Cognitive Neuroscience Society, *Outreach & Training Committee*

Vision Sciences Society, *FoVea Networking Contact*

Working Memory Symposium, *Organizing Committee*

Editorial Service

Consulting Editor, *Journal of Cognitive Neuroscience*

Guest Editor, *Neurobiology of Learning and Memory* — Special Issue on Cognitive Control

Advisory Board Memberships

Journal of Cognitive Neuroscience Discussion Forum (*JoCN*Forum)

Ad-hoc reviewing

Funding Agencies

NIH Human Complex Mental Function study section • NIH Learning, Memory, and Decision Neuroscience study section • National Science Foundation • Wellcome Sir Henry Dale Fellowship

Journals

Annals of the New York Academy of Sciences • Attention, Perception & Psychophysics • BMC Biology • Cell Reports • Cerebral Cortex • Child Development • Cognition • Communications Psychology • Cortex • Current Biology • Current Directions in Psychological Science • eLife • eNeuro • European Journal of Neuroscience • Experimental Brain Research • Frontiers in Human Neuroscience • Frontiers in Psychology • Human Brain Mapping • iScience • Journal of Cognition • Journal of Cognitive Neuroscience • Journal of Experimental Psychology: General • Journal of Experimental Psychology: Human Perception and Performance • Journal of Experimental Psychology: Learning, Memory and Cognition • Journal of Neurophysiology • Journal of Neuroscience • Journal of Vision • Memory • Memory & Cognition • Nature Communications • Nature Human Behaviour • Nature Neuroscience • Nature Reviews Neuroscience • NeuroImage • Neuropsychologia • PCI Registered Reports • PLoS Biology • Psychological Science • Psychonomic Bulletin & Review • Quarterly Journal of Experimental Psychology • Science Advances • Scientific Reports • Trends in Cognitive Sciences • Visual Cognition • WIREs Cognitive Science

Invited Colloquia and Conference Talks

Technische Universität Dresden, Dresden, Germany — June 2026
Bühler Talks, "Working memory beyond the cortex"

Control Processes, Ghent, Belgium — June 2026
Data Blitz, "Interference during working memory sparks healthy competition that strengthens later memory"

University of Washington, Seattle, WA — May 2026
Roger Brown Loucks Lectureship in the Neurophysiological Basis of Learning and Memory, "Everyone knows what working memory is"

Ernst Strüngmann Institute of the Max Planck Society, Frankfurt, Germany — March 2026
ESI Lectures, "Working memory beyond the cortex"

Tagung experimentell arbeitender Psycholog*innen (TEAP), Tübingen, Germany — March 2026
Symposium on Mechanisms of short-term memory, "Competition during working memory enhances long-term memory"

Annual Meeting of the Cognitive Neuroscience Society, Vancouver, CA — March 2026
'Rising Stars' Invited Session, "Working memory beyond the cortex"

Air Force Office of Scientific Research (AFOSR), Arlington, VA — Jan 2026
Cognitive & Computational Neuroscience Program Review, "Sensory, cognitive, and transcranial modulation of goal representations"

Air Force Office of Scientific Research (AFOSR), Arlington, VA — Oct 2023
Cognitive & Computational Neuroscience Program Review, "Sensory, cognitive, and transcranial modulation of goal representations"

UC Santa Barbara, Santa Barbara, CA — May 2023
Department of Psychological & Brain Sciences, CPCN Seminar, "Flexible working memory for adaptive perception and action"

University of Texas at Austin, Austin, Texas — April 2023
Neuroscience Seminar Series, "Flexible working memory for adaptive perception and action"

University of Iowa, Iowa City, IA — April 2023
Psychological & Brain Sciences Brownbag, "Flexibly limited working memory supports perception and action"

Air Force Office of Scientific Research (AFOSR), Arlington, VA — Oct 2022
Cognitive & Computational Neuroscience Program Review, "Sensory, cognitive, and transcranial modulation of goal representations"

Annual Meeting of the Society for Neuroscience, San Deigo, CA — Nov 2022
Nanosymposium on The cognitive neuroscience of working memory, "Long-term experience shapes short-term memory codes"

University of Oxford, Oxford, United Kingdom — June 2021
Department of Experimental Psychology BEACON talk, "Competition and control during working memory"

Vrije Universiteit Amsterdam, Amsterdam, Netherlands — Oct 2021
Cognitive Psychology Department Colloquium, "Competition and control during working memory"

George Washington University, Washington, DC — Nov 2020
Cognitive Neuroscience Brownbag, "Competition and control during working memory"

UC San Diego, La Jolla, CA — Nov 2020
Department of Psychology, Cognitive Brownbag, "Competition and control during working memory"

UCLA, Los Angeles, CA — Feb 2020
Department of Psychology, Cognitive Forum, "Competition and control during working memory"

Columbia University, New York, NY — March 2019
Zuckerman Mind Brain Behavior Institute, "Competition and control during short-term goal retention"

UC San Diego, La Jolla, CA — Feb 2019
Department of Cognitive Science, "Competition and control during short-term goal retention"

Center for Open Science, Charlottesville, VA — Sept 2019
Panel on Being a Reviewer or Editor for Registered Reports, "Practical considerations for navigating Registered Reports"

Annual Meeting of the Society for Neuroscience, San Diego, CA — Nov 2018
Nanosymposium on Human Cognition and Behavior: Working Memory, "Cortico-striatal control over working memory output gating"

North Carolina Conference on Cognition, Raleigh, NC — Mar 2014
Data Blitz, "The working memory Stroop effect: When internal representations clash with external stimuli"

North Carolina Conference on Cognition, Raleigh, NC — Feb 2013
Data Blitz, "It's about time: A mechanistic account of working memory attention interactions"

Annual Meeting of the Society for Neuroscience, New Orleans, LA — Oct 2012
Nanosymposium on Working memory: Representations and Mechanisms, "The 'what' and 'how' of working memory: Dissociating neural mechanisms of declarative and procedural components"

Mentorship

Certification completed: Neuroscience Graduate Program Senior Faculty Mentor Training 2022: Optimizing Faculty Mentoring Relationships at University of California, San Diego

Postdocs

Vivien Chopurien	2025-
Janna Wennberg	2025-
Ian Ballard (*now Assistant Professor at UC Riverside*)	2023

PhD Students

Sihan Yang	2023-
Zhuojun 'Ruby' Ying (co-advised with Marcelo Mattar)	2022-

Ana Chkhaidze (*KIBM Fellowship recipient*; co-advised with Lera Boroditsky) 2022-

Yueying 'Holly' Dong 2020-

Pria Daniel (*Cota-Robles Fellowship recipient*; co-advised with Adam Aron) 2022-2026
Thesis Title: Cortical beta oscillations in motor and cognitive flexibility

Corey Zhou (co-advised with Marcelo Mattar; *now Researcher at Amazon*) 2022-2024
Thesis Title: Adaptive Control with Episodic Mechanisms

Graduate Student Thesis Committees

Leah Ettensohn (UCSD Psychology) 2025-

Isabella Longoria-Valenzuela (UCSD Psychology) 2025-

Holly Kular (UCSD Psychology) 2024-

Amit Rawal (Max Planck at the Ernst Strüngmann Institute) 2022-

Eena Kosik (UCSD Cognitive Science) 2021-

Yang Wang (UCSD Psychology) 2022-2025

Quirine Van-engen (UCSD Cognitive Science) 2021-2025

Isabella Destefano (UCSD Psychology) 2021-2025

Janet Tung (UCSD Cognitive Science) 2021-2025

Louise Stolz (UCSD Neuroscience) 2023-2025

Andrew Bender (UCSD Neuroscience) 2023-2025

Felix Binder (UCSD Cognitive Science) 2023-2025

Janna Wennberg (UCSD Psychology) 2022-2025

Matthew Feigelis (UCSD Cognitive Science) 2021-2024

Sunyoung Park (UCSD Psychology) 2022-2024

Will McCarthy (UCSD Cognitive Science) 2021-2024

Hayden Schill (UCSD Psychology) 2021-2023

Timothy Sheehan (UCSD Neuroscience) 2020-2023

Angus Chapman (UCSD Psychology) 2020-2022

Jonathan Keefe (UCSD Psychology) 2020-2022

Kelsey Sundby (UCSD Psychology) 2020-2021

Frida Printzlau (University of Oxford) 2021

Undergraduate Honor's Thesis Mentorship

Emma Kandel (UC San Diego; *now PhD student at UCLA*) 2023-2025
Project Title: The effects of agency and goal-cohesion on working memory for naturalistic stimuli

Jennifer Hung: (UC San Diego; *now PhD student at Rutgers*) 2023-2025
Project Title: Testing the flexibility of pupillary working memory signals to visual and semantic task demands **Glushko thesis award winner*

Jaden Huynh (UC San Diego) 2022-2023
Project Title: Potential electroencephalogram treatment responsive biomarkers in Obsessive Compulsive Disorder

Sagarika Allavilli (UC San Diego; *now PhD student at Harvard*) 2020-2021
Project Title: The biasing of auditory working memory by a set of similar distractors

Kaiqi Zhang (UC San Diego; *now PhD student at Washington University*) 2020-2021
Project Title: The effect of priority state of working memory content on its vulnerability to interference

Stuti Bansal (UC Berkeley; *now medical student at Mt. Sinai*) 2018-2020

Project Title: Structural-functional relationships in human parietal cortex for working memory capacity

John Lucas (Duke University) 2011-2014
Project Title: Neural mechanisms of reciprocity between working memory and attention

Undergraduate Research Apprenticeships

UC San Diego: Keionni Thompson, Emily Madera, Zoe Tait, Weiwei Liang Brian Fang, Nupoor Patil, Kaushika Uppu, Tiffany Widjaja, Sharai Barrera, Christian Dier-Martinis, Yvonne Luo, Darwin Cervantes, Emma Kandel, Connie Xie, Jennifer Hung, Mycah Gutierrez, Faye Ouyang, Derek Xu 2020-

UC Berkeley: Sijing (Jean) Ye, Stuti Bansal, Joseph Schenker, Lauren Schuck, Jessica Houghton, Murray Andrews, Xinyu Li, Eugene Gil 2015-2020

Duke University: John Lucas, Ada Aka, Hannah Gold 2010-2015

Teaching

COGS 1: *Introduction to Cognitive Science (5x)* Fall 2021 – Winter 2026
A large survey course spanning the history and current topics in Cognitive Science. I supplement conventional assessments with weekly interactive group activities that require critical thinking and integrating over recent lectures (300-400 enrollment).

COGS 17: *Neurobiology of Cognition (3x)* Spring 2020-Winter 2021
A lower division introduction to the biological bases of cognition and behavior. I cover neural signaling and nervous system organization; sensation, perception, and motor function; and I build up to more complex learning & memory topics. I create short, digestible lectures and regular in-class learning activities. I supplement those with at-home videos and exercises, providing several ways to engage with the material (300+ enrollment).

COGS 165: *Neuroimaging of Cognition (6x)* Spring 2020-Fall 2025
A lab course that I developed as an introduction to functional magnetic resonance imaging (fMRI) for cognitive neuroscience research. We cover basic MR physics and biological principles, fMRI experimental design and data collection, as well as major data processing and analysis approaches. We read empirical papers and hold weekly journal clubs, and students work in groups to complete lab activities and produce fMRI study proposals (50-80 enrollment).

COGS 260: *Scientific Writing (5x)* Winter 2021-Winter 2026
A graduate workshop and practical seminar that I developed to promote more effective scientific writing. We devote class time to setting long- and short-term writing goals, discussing and incorporating writing techniques into our work, as well as giving and receiving peer feedback (15-20 enrollment).

COGS 200: *Cognitive Science Seminar* Spring 2021
A themed graduate seminar and speaker series on special topics that rotate quarterly. In addition to organizing the speakers, I developed assignment prompts and mediated structured in-class discussion (15-20 enrollment).

Pedagogical Training

UC San Diego "*Course Design Series*" Engaged Teaching workshop Winter 2020
UC Berkeley, MCB 290 "*Designing a course for undergraduate neuroscience majors*" Fall 2019

Outreach

Colors of the Brain Faculty Mentor 2022-
UCSD program providing paid research experience to students from underrepresented groups

STARS Faculty Mentor 2022-
UCSD Summer Training Academy for Research Success

Marshall Mentor Program Faculty Mentor 2022-
UCSD program pairing transfer students with faculty mentors for career guidance

Cognitive Science Summer Scholars Research Advisor 2021-
UCSD post-baccalaureate program to support career development for students who have faced adversity

Stemanities Judge & Panelist 2020
National High School Research Competition Integrating STEM and the Humanities

NIH Bridges to the Baccalaureate (B2B) Mentor 2016

Fellowships and Honors

Individual Ruth L. Kirchstein Postdoctoral National Research Service Award (NRSA), NIMH 2016-2019
F32MH111204: Network properties and causal mechanisms of distractor-resistant working memory

NIMH Summer Institute in Cognitive Neuroscience Fellowship 2014

Duke Graduate School Summer Research Fellowship 2014

Conference Abstracts

Chopurian V, Miller J, Gaspariani L, Wennberg J, Tambini A, & **Kiyonaga A** (May 2026). Learning shapes neural similarity of visual working memory representations. ***Poster*** *at the Annual Meeting of the* ***Vision Sciences Society,*** *St. Pete Beach, FL.*

Yang S, Dong Y, & **Kiyonaga A** (May 2026). Rapid organization of non-spatial information into spatial structures for adaptive working memory. ***Poster*** *at the Annual Meeting of the* ***Vision Sciences Society,*** *St. Pete Beach, FL*

Dong Y, Chkhaidze A, Gaspariani L, Yang S, & **Kiyonaga A** (May 2026) Eye movements track the emergence and content of flicker-induced visual hallucinations. ***Poster*** *at annual Meeting of the* ***Vision Sciences Society,*** *St. Pete Beach, FL.*

Ying Z, Mattar M, & **Kiyonaga A** (May 2026). Planning favors gist-level ensembles under higher visual working memory demand. ***Poster*** *at the Annual Meeting of the* ***Vision Sciences Society,*** *St. Pete Beach, FL.*

Ballard I, Gaspariani G, Piriyajitakonkij M & Pappas I, & **Kiyonaga A** (March 2026). Competition during working memory enhances long-term memory. ***Poster*** *at the Annual Meeting of the* ***Cognitive Neuroscience Society,*** *Vancouver, Canada.*

Dong Y, Yang S, Hung Y, & **Kiyonaga A** (November 2025). Flexible gaze reinstatement during working memory for natural scenes. ***Poster*** *at the Annual Meeting of the* ***Society for Neuroscience,*** *San Diego, CA.*

Yang S, Dong Y, & **Kiyonaga A** (November 2025). Adaptive offloading: Visual working memory content is flexibly represented in hand and eye movements. ***Poster*** *at the Annual Meeting of the* ***Society for Neuroscience,*** *San Diego, CA.*

Ying Z, Mattar M, & **Kiyonaga A** (November 2025). Working memory demands influence the balance between detailed and gist-level representations during planning. ***Poster*** *at the Annual Meeting of the* ***Society for Neuroscience,*** *San Diego, CA.*

Dong Y, Hung Y, Xie C, & **Kiyonaga A** (May 2025). Pupillary signatures of working memory content are flexible to visual vs. semantic task demands. ***Poster*** *at the Annual Meeting of the* ***Vision Sciences Society,*** *St. Pete Beach, FL.*

Yang S, Dong Y, & **Kiyonaga A** (May 2025). Response modality modulates spatial and temporal biases in visual working memory. ***Poster*** *at the Annual Meeting of the* ***Vision Sciences Society,*** *St. Pete Beach, FL.*

Dong Y, Yang S, Hung Y, & **Kiyonaga A** (March 2025). Flexible gaze reinstatement during working memory for natural scenes. ***Data Blitz*** *and* ***Poster*** *at the Annual Meeting of the* ***Cognitive Neuroscience Society,*** *Boston, MA.*

Ying Z & **Kiyonaga A** (March 2025). Working Memory Demands Influence the Balance between Detailed and Gist-Level Representations during Planning. ***Poster*** *at the Annual Meeting of the* ***Cognitive Neuroscience Society,*** *Boston, MA.*

Yang S, Scimeca JM, & **Kiyonaga A** (March 2025). Fronto-parietal contributions to temporal, spatial, and category biases in visual working memory. ***Poster*** *at the Annual Meeting of the* ***Cognitive Neuroscience Society,*** *Boston, MA.*

Dong Y & **Kiyonaga A** (June 2023) Pupil size tracks graded functional states of working memory maintenance. ***Talk*** *at the* ***Working Memory Symposium.***

Daniel PL & **Kiyonaga A** (March 2023). Beta oscillations in task switching (BOTS): Evidence for a clear-out role of sensorimotor beta. ***Poster*** *at the Annual Meeting of the* ***Cognitive Neuroscience Society,*** *San Francisco, CA.*

Dong Y & **Kiyonaga A** (March 2023). Pupil Size Tracks Graded Functional States of Working Memory Maintenance. ***Poster*** *at the Annual Meeting of the* ***Cognitive Neuroscience Society,*** *San Francisco, CA*

Daniel PL & **Kiyonaga A** (November 2022). Do sensorimotor beta oscillations help or hinder task switching? ***Poster*** *at the Annual Meeting of the* ***Society for Neuroscience,*** *San Diego, CA.*

Cellier D, Scimeca J, & **Kiyonaga A** (November 2022). Frontal and Parietal TMS perturbs serial biases in color working memory. ***Poster*** *at the Annual Meeting of the* ***Society for Neuroscience,*** *San Diego, CA.*

Dong Y & **Kiyonaga A** (November 2022). Pupil Size Tracks Graded Functional States of Working Memory Maintenance. ***Poster*** *at the Annual Meeting of the* ***Society for Neuroscience,*** *San Diego, CA.*

Cellier D, **Kiyonaga A** (April 2022). Distractor effects on working memory are graded by feature similarity and attentional priority state. ***Poster*** *at the Annual Meeting of the* ***Cognitive Neuroscience Society,*** *San Francisco, CA.*

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