

CURRICULUM VITAE

JACQUELINE CLARE WALSH-SNOW, Ph.D.

A BIOGRAPHICAL INFORMATION

1. Personal

Professor, Department of Psychology

University of Utah

Salt Lake City, Utah, 84112

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NIH NLM (Pubmed): https://www.ncbi.nlm.nih.gov/myncbi/1Z5c_eeNEaAK/bibliography/public/

2. Degrees

2000 – 2006 **MPsych. (Clinical Neuropsychology) / PhD (Cognitive Neuroscience)**

University of Melbourne, Australia

1997 **Bachelor of Science (Hons)**

Department of Psychology, Monash University, Australia

1st Class Honours (H1)

1992 – 1995 **Bachelor of Arts (Psychology and Zoology Majors)**

Monash University, Australia

3. Employment and Teaching

July 2025 – current **Professor**

Department of Psychology, The University of Utah, USA

Aug 2024 – Jan 2025 **Interim Chair, Department of Psychology**

University of Nevada, Reno, USA

2023 – Current **Professor**

Program in Cognitive and Brain Sciences and Interdisciplinary Program in Neuroscience, Department of Psychology, University of Nevada, Reno, USA

2018 – 2023 **Associate Professor**

Program in Cognitive and Brain Sciences and Interdisciplinary Program in Neuroscience, Department of Psychology, University of Nevada, Reno, USA

2013 – 2018 **Assistant Professor**

Program in Cognitive and Brain Sciences and Interdisciplinary Program in Neuroscience, Department of Psychology, University of Nevada, Reno, USA

2009 – 2013 **Postdoctoral Research Fellow**

Brain and Mind Institute, University of Western Ontario, Canada

Advisors: Professors Jody Culham and Melvyn Goodale

2006 – 2008 **Postdoctoral Research Fellow**

University of Birmingham, England

Advisor: Professor Glyn Humphreys

2001-2004 **Research Assistant**

Academic Unit for Psychiatry of Old Age. St George's Health Service, Melbourne, Australia

2001-2002	Research Assistant Department of Psychology University of Melbourne, Australia
1998-1999	Adoption and Permanent Care Worker (Level CAFW2) Department of Human Services, Adoption and Permanent Care Unit, Melbourne, Australia
1997-2000	Research Assistant Department of Psychology, Monash University, Australia

4. Honors and Awards

2022	Alan Bible Award for Excellence in Teaching, UNR (runner up)
2018	University of Nevada Regent's Rising Researcher of the Year Award
2017	Mountain West Clinical and Translational Research Network Award for Outstanding Research
2017	University of Nevada Dean's Award for Outstanding Research and Artistry
2012	CIMeC, University of Trento, Italy: 2012 Travel Grant: Best Conference Abstract
2012	2012 <i>Cognitive Neuropsychology</i> Student Travel Prize (1 of 3)
2011	2011 Object Perception and Memory (OPAM) Travel Award (1 of 3)
2006	'Brain Camp' Fellowship, Summer Institute in Cognitive Neuroscience, Dartmouth College, USA

5. Professional Activities, Memberships and Affiliations

Positions Held

July 2025 – current	Professor, Department of Psychology, The University of Utah
Aug 2024 – Jan 2025	Interim Chair, Department of Psychology, University of Nevada, Reno
2021 –	Standing Member: National Institutes of Health, Neuroscience of Basic Visual Processes (NBVP) Study Section (most recent study section Feb 5-6, 2025)
2020 –	Affiliate Member: Vision Science to Applications (VISTA), York University, Canada (https://vista.info.yorku.ca/researchers/affiliate-members/)
2015 – 2018	President, Sierra Nevada Chapter of the Society for Neuroscience (SfN-SfN) (https://med.unr.edu/physio/sncsn)

Memberships

Elected member: International Neuropsychological Symposium (INS) (<https://ins-1951.org/>)
Society for Neuroscience (SfN) (<https://www.sfn.org/>)
Vision Sciences Society (VSS) (<https://www.visionssciences.org/>)
Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS) (<https://www.csbbcs.org/home>)
Women in Cognitive Science (<http://womenincogsci.org/>)
Females of Vision, et al. (<http://www.foveavision.org/>)

6. Editorial and Reviewing Activities

Editorial board

2019 - 2021	Associate Editor, Journal of Neuropsychology
2019 – 2021	Associate Editor, Journal of Experimental Psychology: Human Perception and Performance

Grant Reviewing

National Institutes of Health (NIH)

2020-Current	Standing Member, Neuroscience of Basic Visual Processes (NBVP) Study Section (name change from SPC to NBVP in 2021)
2019	Ad Hoc Reviewer, Mechanisms of Sensory, Perceptual and Cognitive Processes (SPC) Study Section
2018	Ad Hoc Reviewer, Mechanisms of Sensory, Perceptual and Cognitive Processes (SPC) Study Section

European Research Council (ERC)

2024 Ad Hoc reviewer

Ad Hoc Manuscript Reviewing for Scientific Journals

Attention, Perception and Psychophysics

Cerebral Cortex

Cognitive, Affective, and Behavioral Neuroscience

Consciousness and Cognition

Cortex

Current Biology

E-Life

Experimental Brain Research

Frontiers in Human Neuroscience

Frontiers in Psychology: Perception Science

Human Brain Mapping

Journal of Cognitive Neuroscience

Journal of Infant and Child Development

Journal of Experimental Child Psychology

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 Perceptual Imaging

Journal of Vision

Multisensory Research

NeuroImage

Neuropsychologia

Neuroscience Letters

Proceedings of the Royal Society of London: Series B

PLoS One

Proceedings of the National Academy of Science (PNAS)

Psychological Science

Quarterly Journal of Experimental Psychology

Trends in Cognitive Science

Vision Research

B RESEARCH AWARDS

2024 – 2028 NIH-NEI R01: “Bringing the Real-World into Cognitive Neuroscience: From Images to Real Objects”. Role: Principal Investigator

2020 – 2023 Vision: Science to Applications (VISTA) Visiting Scholar Award. York University, Toronto, Canada. Role: Principal Investigator

2016 – 2023 NIH-NEI R01: “Bringing the Real-World into Cognitive Neuroscience: From Images to Real Objects”. Role: Principal Investigator

2021 - 2022	<u>Mountain West Clinical Translational Research – Infrastructure Network (MW CTR-IN)</u> Pilot Project Enhancement Grant (PPEG): “Identifying the human cognitive and neural mechanisms that drive real-world food choice and obesity”. Role: Principal Investigator
2016 - 2022	<u>NSF EPSCoR RII Track II</u> : “Neural networks underlying the integration of knowledge and perception”. Role: Co-Principal Investigator
2017 - 2018	<u>META Co.</u> Industry Grant, “Comparing Behavioral and Neural Signatures of High-Fidelity Augmented Reality Images with Real Objects”. Role: Principal Investigator
2017	<u>University of Nevada Reno</u> , College of Liberal Arts Equipment Grant
2016 - 2017	<u>Mountain West Clinical Translational Research Infrastructure Network (MW CTR-IN)</u> : “How human food decisions are influenced by real object versus image displays”. Role: Principal Investigator
2016 - 2017	<u>University of Nevada Reno</u> , Scholarly and Creative Activities Grant (SCAGS): “How human food decisions are influenced by real object versus image displays. Role: Principal Investigator
2016	<u>University of Nevada Reno</u> , College of Liberal Arts Equipment Grant
2014 – 2015	<u>NIH-NIGMS</u> : COBRE NEURO-PILOT PRJ1 ‘12/YR3 – Pilot Project Grant. Role: Pilot Project Leader
2014	<u>University of Nevada Reno</u> , Acquisition of Instructional and Research Equipment (AIRE) Award
2008 – 2009	<u>Canadian Institute of Health Research (CIHR)</u> : Vision Health Research Training Grant, York University, Canada
2006	<u>University of Birmingham</u> Early Researcher Start-up Grant
2005	<u>University of Melbourne</u> Travel Abroad Scholarship
2005	<u>University of Melbourne</u> Travel Grant
2002 – 2005	<u>Australian Government</u> – Australian Postgraduate Award (APA)

C PUBLICATIONS

1a. Refereed Journal Articles: under revision, published or in press
(Students underlined)

Fairchild, G.T., Holler, D.E., Fabbri, S., Gomez, M.A., Rudd, M., & Walsh-Snow, J.C. (in press). Object Representations in human ventral and dorsal cortex depend on display format and physical distance. *Cerebral Cortex*.

Walsh-Snow, J.C., Yang, Y., & Romero, C. Perceived food value depends on display format, preference strength, and physical accessibility. *Appetite*. May 1:209:107973. doi: 10.1016/j.appet.2025.107973. PMID: 40118254.

Snow, J.C., Gomez, M.A., and Compton, M.T. (2023). Human memory for real-world solid objects is not predicted by responses to image displays. *Journal of Experimental Psychology: General*, 152(10), 2703-2712. doi: 10.1037/xge0001387. PMID: 37079829.

Gomez, M., and **Snow, J.C.** (2023). How to construct liquid-crystal spectacles to control vision of real-world objects and environments. *Behavior Research Methods*. doi: 10.3758/s13428-023-02059-8.

Gurariy, G., Mruczek, R., **Snow, J.C.,** and Caplovitz, G. (2022). Using HD-EEG to explore spatiotemporal representations of object categories in visual cortex. *Journal of Cognitive Neuroscience*. 34(6): 967-987. doi: 10.1162/jocn_a_01845.

Fairchild, G.T., Marini, F., and **Snow, J.C.** (2021). Graspability modulates the stronger EEG signature of motor preparation for real objects vs. pictures. *Journal of Cognitive Neuroscience*. 33 (12): 2477–2493. doi: https://doi.org/10.1162/jocn_a_01771.

Snow, J.C. and Culham, J.C. (2021). The treachery of images: How realism influences brain and behaviour. *Trends in Cognitive Sciences*. 25(6): 506-519. doi: 10.1016/j.tics.2021.02.008.

Freud, E., Behrmann, M., and **Snow, J.C.** (2020). What does dorsal cortex contribute to perception? *Open Mind: Discoveries in Cognitive Science*. doi: https://doi.org/10.1162/opmi_a_00033.

Holler, D., Fabbri, S., and **Snow, J.C.** (2020). Object responses are highly malleable, rather than invariant, with changes in object appearance. *Scientific Reports*, 10 (1), 4654. doi: 10.1038/s41598-020-61447-8.

Romero, C.A. and **Snow, J.C.** (2019). Methods for presenting real-world objects under controlled laboratory conditions. *Journal of Visualized Experiments*, (148), e59762, doi:10.3791/59762.

Holler, D., Behrmann, M., and **Snow, J.C.** (2019). Real-world size coding of solid objects, but not 2-D or 3-D images, in visual agnosia patients with bilateral ventral lesions. *Cortex*, 119: 555-568. doi.org/10.1016/j.cortex.2019.02.030.

Marini, F., Breeding, K.A., and **Snow, J.C.** (2019). Distinct visuo-motor brain dynamics for real-world objects versus planar images. *NeuroImage*, 195: 232-242. doi.org/10.1016/j.neuroimage.2019.02.026.

Marini, F., Breeding, K.A., and **Snow, J.C.** (2019). Dataset of 24-subject EEG recordings during viewing of real-world objects and planar images of the same items. *Data in Brief*, 24:103857, doi: 10.1016/j.dib.2019.103857.

Buckingham, G., Holler, D., Michelakakis, E.E., and **Snow, J.C.** (2018). Preserved object weight processing after bilateral LOC lesions. *Journal of Cognitive Neuroscience*, 30(11): 1683-1690. doi: 10.1162/jocn_a_01314.

- Erlikhman, G., Caplovitz, G.P., Gurariy, G, Medina, J. and **Snow, J.C.** (2018). Towards a unified perspective of object shape and motion processing in human dorsal cortex. *Consciousness and Cognition*, 64: 106-120. doi: 10.1016/j.concog.2018.04.016.
- Romero, C.A., Compton, M.T., Yang, Y., and **Snow, J.C.** (2018). The *real deal*: Willingness-to-pay and satiety expectations are greater for real foods versus their images. *Cortex*. 107: 78-91. doi: <https://doi.org/10.1016/j.cortex.2017.11.010>.
- Gomez, M.A., Skiba, R.M. and **Snow, J.C.** (2018). Graspable objects grab attention more than images do. *Psychological Science*, 29 (2): 206-218. doi: 10.1177/0956797617730599.
- Gomez, M.A., and **Snow, J.C.** (2017). Action properties of object images facilitate visual search. *Journal of Experimental Psychology: Human Perception and Performance*, 43(6):1115-1124. doi: 10.1037/xhp0000390.
- Chen, J., **Snow, J.C.**, Culham, J.C., and Goodale, M.A. (2017). What Role Does “Elongation” Play in “Tool-Specific” Activation and Connectivity in the Dorsal and Ventral Visual Streams? *Cerebral Cortex*, 28 (4): 1117-1131. doi: 10.1093/cercor/bhx017.
- Skiba, R.M., and **Snow, J.C.** (2016). Attentional capture for tool images is driven by the head end of the tool, not the handle. *Attention, Perception and Psychophysics*. 78(8): 2500-2514. doi: 0.3758/s13414-016-1179-3.
- Squires, S.D., Macdonald, S.N., Culham, J.C., and **Snow, J.C.** (2016). Priming tool actions: Are real objects more effective primes than pictures? *Experimental Brain Research*. 234(4): 963-76. doi: 10.1007/s00221-015-4518-z.
- Snow, J.C.**, Goodale, M.G., and Culham, J.C. (2015). Preserved haptic shape processing after bilateral LOC lesions. *Journal of Neuroscience*. 35(40), 13745-60. doi: 10.1523/JNEUROSCI.0859-14.2015.
- Barnett-Cowan, M., **Snow, J.C.**, and Culham, J.C. (2015). Contribution of bodily and gravitational orientation cues to face and letter recognition. *Multisensory Research*. 28 (5-6): 427-442. doi:10.1163/22134808-00002481.
- Snow, J.C.**, Skiba, R.M., Coleman, T.L., and Berryhill, M.E. (2014). Real-world objects are more memorable than photographs of objects. *Frontiers in Human Neuroscience*, 8 (Article 837): 1-11. doi: 10.3389/fnhum.2014.00837.
- Snow, J.C.**, Strother, L., and Humphreys, G.W. (2014). Haptic shape representation in visual cortex. *Journal of Cognitive Neuroscience*, 26 (5): 1154-67. doi: 10.1162/jocn_a_00548. PMID: 24345179.
- Podrebarac, S., Goodale, M.A., and **Snow J.C.** (2014). Are visual texture-selective areas recruited during haptic texture discrimination? *NeuroImage*, 94: 129-37. doi: 10.1016/j.neuroimage.2014.03.013. PMID: 24650604.
- Podrebarac, S., Goodale, M.A., van der Zwan, R., and **Snow, J.C.** (2013) Gender-selective neural populations: evidence from event-related fMR repetition suppression. *Experimental Brain Research*, 226(2), 241-252. doi: 10.1007/s00221-013-3429-0. PMID: 23435496.

- Snow, J.C., Miranda, R.R., Humphreys, G.W.** (2013). Impaired visual sensitivity within the ipsilesional hemifield following unilateral parietal damage. *Cortex*, 49, 158-171. doi: 10.1016/j.cortex.2011.07.005. PMID: 21889133.
- Snow, J.C., Pettypiece, C.E., McAdam, T.D., McLean, A.D., Stroman, P.W., Goodale, M.A. and Culham, J.C.** (2011). Bringing the real world into the fMRI scanner: Repetition effects for pictures versus real objects. *Scientific Reports*, 1(130), doi: 10.1038/srep00130. PMID: 22355647.
- Snow, J.C., Allen, H.A., Rafal, R.D., and Humphreys, G.W.** (2009). Impaired attentional selection following lesions to human pulvinar: Evidence for homology between human and monkey. *Proceedings of the National Academy of Sciences of the USA*, 106 (10), 4054 – 4059. doi: 10.1073/pnas.0810086106. PMID: 19237580.
- Snow, J.C., and Mattingley, J.B.** (2008). Central perceptual load does not reduce ipsilesional flanker interference in parietal extinction. *Neuropsychology*, 22 (3), 371-382. doi: 10.1037/0894-4105.22.3.371. PMID: 18444715.
- Snow, J.C., and Mattingley, J.B.** (2006). Goal-driven selective attention in patients with right hemisphere lesions: How intact is the ipsilesional field? *Brain*, 129 (Pt 1): 168-181. doi: 10.1093/brain/awh690.
- Snow, J.C., and Mattingley, J.B.** (2006). Stimulus- and goal-driven biases of selective attention following unilateral brain damage: Implications for rehabilitation of spatial neglect and extinction. *Restorative Neurology and Neuroscience*, 24 (6), 233 – 245.

1b. Commentaries

- Fairchild, G., and **Snow, J.C.** (2020). How the brain represents mass. *eLife*, 2020;9:e54373. DOI: <https://doi.org/10.7554/eLife.54373>.

2. Books and Book Chapters

- Snow, J.C., and Mattingley, J.B.** (2003). Perception, Unconscious. Encyclopedia of Cognitive Science. John Wiley and Sons, Ltd. Print ISBN: 9780470016190. doi: 10.1002/0470018860

D PRESENTATIONS

1. Invited papers presented at scientific meetings

- 2023 **Walsh-Snow, J.C.** International Neuropsychological Symposium (INS). Villasimius, Italy. June 19-23. How stimulus realism influences human behavior and brain responses.
- 2022 **Walsh-Snow, J.C.** Experimental Psychology Society (EPS) Meeting, University of Stirling, Scotland, UK (July 13-15). Studying how realism influences brain and behavior: A brief history, current challenges, and new horizons.

- 2022 **Snow, J.C.** Vision Research Conference York University, Canada. Vision research: From picture to reality, from observer to agent (June 6-9). Studying realism may provide critical insights into the evolution and development of object vision.
- 2021 **Snow, J.C.** XVII Annual Meeting of the Chilean Society for Neuroscience (online meeting due to COVID). Studying how realism influences brain and behavior: A brief history, current and new horizons.
- 2019 **Snow, J.C.** Core Outreach Workshop in Clinical Neuropsychology, University of Delaware. The 'human experience' of neuropsychological research.
- 2019 **Snow, J.C.** Human Vision and Electronic Imaging, IS&T Symposium on Electronic Imaging, Burlingame, CA. 'Wonkavision' and the need for a paradigm shift in vision research.
- 2018 **Snow, J.C.** NIH, NIGMS, 7th Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE), Washington D.C. The real deal: Willingness-to-pay and satiety expectations are greater for real foods versus their images.
- 2018 **Snow, J.C.** Banff Annual Seminar in Cognitive Science (BASICS). Alberta, Canada. Beyond images: an emerging paradigm shift in the study of human cognition and neuroscience.
- 2017 Fabbri, S., Culham, J. C., and **Snow, J.C.** Nederlandse Vereniging voor Psychonomie (NVP) Winter Conference. Egmond aan Zee, the Netherlands. Interacting with objects in space.
- 2017 **Snow, J.C.** Clinical and Translational Infrastructure Network (CTR-IN) 4th Annual Meeting, University of Las Vegas, NV. The importance of CTR-IN Pilot Project Grants for early career researchers.
- 2017 **Snow, J.C.** Clinical and Translational Infrastructure Network (CTR-IN) 4th Annual Meeting, University of Las Vegas, NV. Creatures of Habit: How human food decisions are influenced by real food vs. image displays.
- 2017 **Snow, J.C.** Neural Correlates of Consciousness Meeting, University of California, Davis, CA. A functional role for dorsal cortex in coding the physical size of real familiar objects.
- 2017 **Snow, J.C.** AR in Action Summit, MIT Media Lab, Boston, MA. The Neuroscience of Realness.
- 2016 **Snow, J.C.** American Psychological Association, Annual Convention, Denver, CO. Real-world size improves recognition of real objects, not images.
- 2016 Culham, J.C., Fabbri, S., Gallivan, J., Freud, E., and **Snow, J.C.** Society for the Neural Control of Movement, 26th Annual Meeting, Montego Bay, Jamaica. Human neuroimaging reveals the importance of real hand actions upon real objects for neural coding in the anterior intraparietal sulcus.
- 2016 Culham, J. C., **Snow, J. C.**, Gerhard, T. M., Schwarzer, G. 31st International Congress of Psychology, Yokohama, Japan. The treachery of images: Why the brain responds differently to real object than photos.

- 2015 **Snow, J.C.** Bay Area Vision Research Day, UC Berkeley. The treachery of images”: Studying behavioral and brain responses to real-world objects.
- 2013 **Snow, J.C.** 5th Annual Research Symposium: The Sierra Nevada Chapter of the Society for Neuroscience (SNC-SfN), University of Nevada, USA. Bringing the Real World into Cognitive Neuroscience
- 2012 **Snow, J.C.** Center for Mind/Brain Sciences (CIMEC), University of Trento, Italy. Invited talk and poster; Rovereto workshop on Concepts, Actions, and Objects (CAOs): Functional and Neural Perspectives. Center for Mind/Brain Sciences, (CIMEC), University of Trento, Italy. The lateral occipital area is not necessary for haptic shape recognition.

2. Papers presented at meetings and symposia

Fairchild, G.T., Lee, S., Compton, M., Fabbri, S., Nemeth, C., Strother, L., **Walsh-Snow, J.C.** (Oct, 2024). Brain networks involved in recognition memory are recruited more strongly, and more extensively, by real objects than by images of objects. Society for Neuroscience, Chicago, IL.

Fairchild, G.T., Lee, S., Compton, M., Fabbri, S., Nemeth, C., Strother, L., **Walsh-Snow, J.C.** (June, 2024). Brain networks involved in recognition memory are recruited more strongly, and more extensively, by real objects than by images of objects. International Multisensory Research Forum (IMRF), Reno, NV.

Walsh-Snow, J.C. (2024) Can artificial intelligence be leveraged for human assistive vision? University of Nevada, Reno, Data Science Conference.

Walsh-Snow, J.C. (2024) How realism influences perception. University of Nevada, Reno, AR/VR/XR Conference.

Fairchild, G.T., Lee, S., Compton, M., Fabbri, S., Nemeth, C., Strother, L., **Walsh-Snow, J.C.** (May, 2024). Brain networks involved in recognition memory are recruited more strongly, and more extensively, by real objects than by images of objects. Vision Sciences Society, St. Pete’s Beach, FL.

Fairchild, G.T., Holler, D.E., Fabbri, S., Gomez, M.A., **Snow, J.C.** (2023). The effects of physical stimulus distance on representations of real objects and pictures in the dorsal and ventral visual streams. Vision Sciences Society, St. Pete’s Beach, FL.

Fairchild, G.T., Kavcar, O., Rudd, M., Roach, R., Gomez, M., **Snow, J.C.** (2021). Discriminable human gaze patterns for solid objects versus 2-D and 3-D images of those objects. Vision Sciences Society, Virtual meeting.

Fairchild, G.T., Marini, F., **Snow, J.C.** (2019). Is the stronger EEG signature of motor preparation for real objects versus images modulated by graspability? Society for Neuroscience, Chicago, IL.

Fabbri, S., Holler, D., **Snow, J.C.** (2019). Real-world solid objects are represented differently to 2-D images and ‘graspable’ 3-D augmented reality images of objects. Concepts, Actions and Objects Workshop, Rovereto, Italy.

Sztybel, P., Gomez, M., Snow, J.C. (2019). Graspable objects grab attention more than images do –even when no motor response is required? Vision Sciences Society, St. Pete’s Beach, FL.

Holler, D. E., Fabbri, S. Snow, J.C. (2019). Similarities and differences in the representation of real objects, 2-D images, and 3-D augmented reality displays: Insights from inverse multidimensional scaling. Vision Sciences Society, St. Pete’s Beach, FL.

Fabbri, S., Holler, D., Snow, J.C. (2018). Exploring the continuum between semantic and physical representations using inverse multidimensional scaling. Perception Day, University of Groningen, The Netherlands.

Romero, C., Snow, J.C. (2018). Real food displays and accessibility increase valuation. Society for Neuroscience, San Diego, CA.

Holler, D., Fabbri, S., Snow, J.C. (2018). Similarities and differences in the representation of real objects versus 2-D images and 3-D augmented reality displays: Evidence from inverse multidimensional scaling. Society for Neuroscience, San Diego, CA.

Fairchild, G.T., Marini, F., Breeding, K.A., Snow, J.C. (2018). Is the stronger EEG signature of motor preparation for real objects versus images modulated by graspability? Optical Society of America (OSA) Fall Vision Meeting. Reno, USA.

Holler, D., Fabbri, S., Snow, J.C. (2018). Similarities and differences in the representation of real objects versus 2-D images and 3-D augmented reality displays: Evidence from inverse multidimensional scaling. Optical Society of America (OSA) Fall Vision Meeting. Reno, USA.

Compton, M.T., Fabbri, S., O’Neil, E.B., Strother, L., Snow, J.C. (2018). fMRI response patterns in human somato-motor cortex predict memory advantage for real objects versus their images. Optical Society of America (OSA) Fall Vision Meeting. Reno, USA.

Fabbri, S., Holler, D., Snow, J.C. (2018). Similarities and differences in the representation of real objects and images: insights from inverse multidimensional scaling. Vision Sciences Society, St. Pete’s Beach, FL.

Marini, F., Breeding, K.A., and Snow, J.C. (2018). Using EEG to compare brain responses to graspable real-world objects versus 2D images. Vision Sciences Society, St. Pete’s Beach, FL.

Gomez, M.A., Webster, M. and Snow, J.C. (2018). Attenuated tilt illusion for real-world versus pictorial displays. Vision Sciences Society, St. Pete’s Beach, FL.

Fabbri, S., Compton, M.T., O’Neil, E.B., Strother, L. Snow, J.C. (2018). fMRI response patterns in human somato-motor cortex predict memory advantage for real objects versus their images. Vision Sciences Society, St. Pete’s Beach, FL.

Gurariy, G., Snow, J.C., Mruczek, R.E.B., Johnson, M.R., Mardock, J., Caplovitz, G.P. (2018). Using HD-EEG to explore spatiotemporal representations of object categories in visual cortex. Vision Sciences Society, St. Pete’s Beach, FL.

- Marini, F., Breeding, K.A., and Snow, J.C. (2017). Using EEG to compare brain responses to graspable real-world objects versus 2D pictures. UCSD Postdoctoral Association Annual Research Symposium, San Diego, CA.
- Buckingham, G., McIntosh, R.D., and **Snow, J.C.** (2017). The neuropsychology of weight perception. Conference of the British Association for Cognitive Neuroscience, Plymouth, UK.
- Marini, F., Breeding, K.A., and Snow, J.C. (2017). Using EEG to compare brain responses to graspable real-world objects versus 2D pictures. Society for Neuroscience, Washington, DC.
- Romero, C., Compton, M., Yang, Y., and Snow, J.C. (2017). The real deal: confirming the 'Real-Exposure Effect' on food decisions. Society for Neuroscience, Washington, DC.
- Compton, M.T. and Snow, J.C. (2017). 'Memory for real objects is better than images - but only when they are within reach'. Vision Sciences Society, St. Pete's Beach, FL.
- Snow, J.C.** (2016). Real-world size improves recognition of real objects, not images. Society for Neuroscience, San Diego, CA.
- Compton, M.T., O'Neil, E.B., Strother, L., and Snow, J.C. (2016). The neural correlates of the 'Real Object Memory Advantage'. Society for Neuroscience, San Diego, CA.
- Romero, C.S., Gomez, M.A., McGuire, J.T., and Snow, J.C. (2016). Motor affordance biases subjective value. Society for Neuroscience, San Diego, CA.
- Romero, C.S., Haddad, N.R., and Snow, J.C. (2016). Increased willingness-to-pay for real foods versus image displays. Vision Sciences Society, St. Pete's Beach, FL.
- Compton, M.T., O'Neil, E.B., Strother, L., and Snow, J.C. (2016). Exploring the 'Real Object Advantage' in Recognition Memory using fMRI. Vision Sciences Society, St. Pete's Beach, FL.
- Snow, J. C., Squires S. D., Stubbs, K. M., Culham, J. C.** (2016). fMRI reveals different activation patterns for real objects vs. photographs of objects. Vision Sciences Society, St. Pete's Beach, FL.
- Holler, D. E., Snow, J. C. (2016). Real-world size improves recognition of real objects, not images. 6th Biennial National Idea Symposium Biomedical Research Excellence (NISBRE) Conference, Washington, DC.
- Holler, D. E., Snow, J. C. (2016). Real-world size improves recognition of real objects, not images. Vision Sciences Society, St. Pete's Beach, FL.
- Gomez, M.A., Snow, J.C. (2016). Greater Flanker Effects are observed when Action-Based Stimuli are Real vs. Images. Vision Sciences Society, St. Pete Beach, FL.
- Skiba, R.M., Delloro, A., and Snow, J.C. (2016) 'Pseudoneglect for real reachable objects, not images. 6th Biennial National Idea Symposium Biomedical Research Excellence (NISBRE), Washington, DC.

- Skiba, R.M., Delloro, A., and **Snow, J.C.** (2016) Stereo shape cues influence gaze patterns during grasping, but not perceptual, tasks. 6th Biennial National Idea Symposium Biomedical Research Excellence (NISBRE) Conference, Washington, DC.
- Gomez, M.A., **Snow, J.C.** (2016). Greater Flanker Effects for Real vs. Images of Action-Based Stimuli. Society for Neuroscience, San Diego, CA.
- Skiba, R.M., Papa, T., and **Snow, J.C.** (2015) Eye movements to tool images are predicted by frequency of physical experience with the tool. Vision Sciences Society, Naples, FL.
- Compton, M.T. and **Snow, J.C.** (2015). Real objects are recalled better than photographs of objects. Society for Neuroscience, Sierra Nevada Chapter Research Symposium, Reno, NV.
- Compton, M.T. and **Snow, J.C.** (2015). Real object memory advantage: Graspability enhances performance, Bay Area Vision Research Day, Berkeley, CA.
- Compton, M.T. and **Snow, J.C.** (2015). Real objects are recalled better than photographs of objects. Vision Sciences Society, Naples, FL.
- Holler, D., Chin, A., Goodale, M., **Snow, J. C.** (2015). Real-world size improves object recognition in visual agnosia. Society for Neuroscience, Sierra Nevada Chapter Research Symposium, Reno, NV.
- Holler, D., Chin, A., Goodale, M., **Snow, J. C.** (2015). Real-world size improves object recognition in visual agnosia. Bay Area Vision Research Day (BAVRD) Berkeley, CA.
- Gomez, M.A., **Snow, J.C.** (2015). Real Objects Elicit Stronger Action Affordance Effects than Images, Sierra Nevada Chapter of the Society for Neuroscience 7th Annual Research Symposium, Reno, NV.
- Gomez, M.A., **Snow, J.C.** (2015). Real Objects Elicit Stronger Action Affordance Effects than Images. UC Bay Area Vision Research Day (BAVRD) Berkeley, CA.
- Gomez, M.A., **Snow, J.C.** (2015). Implied Action Affordance Facilitates Visual Search, Vision Sciences Society, St. Pete Beach, FL.
- Snow, J. C.**, Squires, S. D., Stubbs, K. M., Culham, J. C. (2015). fMRI reveals different activation patterns for real objects vs. photographs of objects. Society for Neuroscience, Chicago, Illinois, USA.
- Squires S. D., **Snow, J. C.**, Stubbs, K. M., Culham, J. C. (2015). fMRI reveals representational similarity for objects that are used on the body vs. other objects. Society for Neuroscience, Chicago, Illinois, USA.
- Compton, M.T. and **Snow, J.C.** (2014). Real objects are recalled better, and sooner, than are photographs of objects, Vision Sciences Society, Naples, FL.
- Gomez, M.A., **Snow, J.C.** (2014). Implied Action Affordance Facilitates Visual Search, Poster presentation for the Sierra Nevada Chapter of the Society for Neuroscience 6th Annual Research Symposium, Reno NV.

- Coleman, T.L., Skiba, R.M., Berryhill, M.E., **Snow, J.C.** (2014). Bringing the real world into cognitive neuroscience: Real objects are more memorable than pictures are. Vision Sciences Society, Naples, FL.
- Squires, S. D., Macdonald, S. N., Quinlan, D. J., Paciocco, J. U., Culham, J. C., and **Snow, J. C.** (July 2014). Do real tools prime hand actions more than photographs of tools? Poster at Canadian Society for Brain, Behavior and Cognitive Science, Toronto, ON.
- Snow, J.C.**, Coleman, T.L., and Goodale, M.A. (2014). Real-world size improves object recognition in visual form agnosia. Vision Sciences Society, Naples, FL.
- Squires, S. D., Macdonald, S. N., Quinlan, D. J., Paciocco, J. U., Culham, J. C., **Snow, J. C.** (May 2014). Do real tools prime hand actions more than photographs of tools? Poster at Southern Ontario Neuroscience Association, London, Ontario, Canada.
- Chen, J., Goodale, M.A., Culham, J.C., and **Snow, J.C.** (2014). fMRI activation and connectivity in the dorsal and ventral visual streams for elongated and stubby tools and non-tools. Vision Sciences Society, Naples, FL.
- Snow, J. C.** Behrmann, M., Goodale, M.A. (2013). Neuropsychological evidence for separate shape representations in vision and touch: a study using the Judd variant of the Muller-Lyer illusion. Vision Sciences Society, FL.
- Snow, J. C.**, Culham, J. C., Rangel, A. (2013). Bringing the real world into the fMRI scanner: Real objects amplify the neural correlates of valuation compared to photos. Poster Society for Neuroscience, San Diego, CA, USA.
- Culham, J. C., **Snow, J. C.**, Rangel, A. (2012). Bringing the real world into the fMRI scanner: Real objects amplify the neural correlates of valuation compared to photos. Vision Sciences Society, FL.
- Podrebarac, S., Goodale, M.A., **Snow, J.C.** (2012). Are visual texture-selective areas recruited during haptic texture discrimination? Vision Sciences Society, FL.
- Snow, J.C.**, Goodale, M.A., Culham, J.C. (2012). The lateral occipital area is not necessary for haptic shape recognition. Talk at Society for Neuroscience, New Orleans, LA, USA.
- Barnett-Cowan, M., **Snow, J.C.**, Culham, J.C. (2012). Haptic object recognition is influenced by the orientation of the body relative to gravity. Society for Neuroscience, New Orleans, LA, USA.
- Barnett-Cowan, M., Culham, J. C., **Snow, J. C.** (2012). Haptic object recognition is influenced by the orientation of the body relative to gravity. Poster at International Multisensory Research Forum, Oxford, U.K. [Abstract published in Seeing and Perceiving, 2012, 25, 122].
- Gallivan, J.P., **Snow, J.C.**, McLean, A., Pettypiece, C.E., Culham, J. (2012) Haptic shape decoding in primary visual cortex. Talk at Society for Neuroscience, New Orleans, LA, USA.
- Snow, J.C.**, Goodale, M.A., Culham, J.C. (2012). The lateral occipital area is not necessary for haptic shape recognition. Talk at Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS) 22nd Annual Meeting, Kingston, Ontario, Canada.

- Snow, J.C.**, Strother, L., Coros, A., Culham, J.C. (2012). How independent are form and color in the ventral visual pathway? Poster; Vision Sciences Society, FL.
- Podrebarac, S., Goodale, M.A., van der Zwan, **Snow, J.C.** (2012). Gender-selective neural populations within the occipital and fusiform face areas: Evidence from rapid event-related fMRI. Talk; Vision Sciences Society, FL.
- Barnett-Cowan, M., Culham, J.C., **Snow, J.C.** (2012). The haptic perceptual upright. Poster; Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS) 22nd Annual Meeting, Kingston, Canada.
- Snow, J.C.**, Culham, J.C. (2011). Is the lateral occipital complex necessary for haptic object recognition? Object shape representation in a visual agnosic with bilateral occipito-temporal lesions. Talk, OPAM: 19th Annual Meeting, Seattle, WA, USA.
- Snow, J.C.**, Pettypiece, C.E., McAdam, T.D., Stroman, P.W., Culham, J.C. (2011). Bringing the real world into the fMRI scanner: robust repetition suppression for 2D pictures but not actual 3D objects. Talk, Vision Sciences Society, FL.
- Snow, J.C.**, Pettypiece, C.E., McAdam, T.D., Stroman, P.W., Culham, J.C. (2009). No fMRI repetition suppression for real 3D objects, only 2D pictures of objects: An unexpected result. Talk at Society for Neuroscience, Washington D.C., October.
- Snow, J.C.**, Allen, H.A., Strother, L., Miall, R. C., Humphreys, G.W. (2008). Multisensory visuo-tactile integration in LOC and parietal cortex: a study using fMRI adaptation. Society for Neuroscience, Washington D.C.
- Snow, J.C.**, Allen, H.A., Rafal, R.D., Humphreys, G.W. (2007). Impairments in attentional selectivity following lesions to human pulvinar. Vision Sciences Society, May, Sarasota, FL.
- Snow, J.C.**, Allen, H.A., Rafal, R.D., Humphreys, G.W. (2007) Impaired selection following lesions to human pulvinar. International Brain Research Organization (IBRO) 7th World Congress of Neuroscience, Melbourne, Victoria, Australia.
- Snow, J.C.**, Mattingley, J.B. (2005). The role of goal-directed attention in inhibiting task-irrelevant information in parietal extinction. 12th Annual Meeting of the Cognitive Neuroscience Society, NY, U.S.A.
- Snow, J.C.**, Mattingley, J.B. (2005). The role of goal-directed attention in inhibiting task-irrelevant information in parietal extinction. 32nd Australian Experimental Psychology Conference, Melbourne, Australia.

3. Departmental colloquia/seminars

- 2024 Department of Psychology, University of Utah. Bringing the “real world” into cognitive neuroscience: How, and why, realism influences brain and behavior.

- 2020 UNLV Psychological Brain Sciences Proseminar series. The treachery of images: Why the brain responds differently to real objects than to photos.
- 2019 Department of Psychology, University of Nebraska - Lincoln. 'Wonkavision' and the need for a paradigm shift in vision research.
- 2019 Department of Psychology, Western University, London, Canada. 'Wonkavision' and the need for a paradigm shift in vision research.
- 2019 Department of Psychology, York University, Toronto, Canada. 'Wonkavision' and the need for a paradigm shift in vision research.
- 2018 Department of Psychology, University of Wisconsin, Madison. 'The treachery of images: why we need a paradigm shift in human brain research'.
- 2018 Center for Advanced Studies (CAS) Annual Meeting, University of Nevada Reno, USA. 'The treachery of images: why we need a paradigm shift in human brain research'.
- 2017 Research Colloquium, META Co. San Mateo, CA, USA. 'Human neuroscience can inform the development of augmented reality displays'.
- 2017 Psychology Department Colloquium, North Dakota State University, Fargo, ND, USA. 'The Neuroscience of Realness'.
- 2017 Psychology Department Colloquium, University of Delaware, Newark, DE. 'The treachery of images: how (and why) behavior and brain responses differ for real-world objects versus their representations'.
- 2016 Cognitive Science Colloquium, University of Arizona, Tucson, Arizona, USA. 'The treachery of images: how (and why) behavior and brain responses differ for real-world objects versus their representations'.
- 2013 Department of Psychology, University of Nevada, Reno, USA. 'Bringing the Real World into Cognitive Neuroscience'.
- 2011 Department of Psychology, Auburn University, AL, USA. 'Bringing the 'real world' into the fMRI scanner: Novel studies of perception and representation of real-world objects.
- 2011 Department of Psychology, University of Western Australia, Perth, Australia. 'Bringing the 'real world' into the fMRI scanner: Novel studies of perception and representation of real-world objects'.
- 2011 Department of Psychology, University of Arizona, AZ, USA. 'Bringing the 'real world' into the fMRI scanner: Object perception and representation in human visual cortex'.
- 2010 Department of Neuroscience and Physiotherapy, University of West Virginia, WV, USA. 'Bringing the 'real world' into the fMRI scanner: Object perception and representation in human visual cortex'.

- 2009 Department of Psychology, York University, Toronto, ON, Canada. Guest Lecture: Vision Health and Visual Disabilities Graduate Seminar Series. 'Multisensory visuo-tactile integration in LOC and parietal cortex'.
- 2007 Attention Group, MRC Cognition and Brain Sciences Unit, Cambridge, UK. 'What can parietal and pulvinar lesions tell us about salience and selectivity?'
- 2006 Department of Psychological and Brain Sciences, Johns Hopkins University, Baltimore, USA. What can parietal and pulvinar lesions tell us about salience and selectivity?
- 2006 Department of Cognitive Neuroscience and Cognitive Systems, University of Kent, UK. What can parietal and pulvinar lesions tell us about salience and selectivity?
- 2006 Research Staff Annual Meeting, Department of Psychology, University of Birmingham, UK. What can parietal and pulvinar lesions tell us about salience and selectivity?
- 2005 Department of Neuroscience and Clinical Neurology, University of Geneva, Switzerland. 'Inhibitory control in unilateral neglect and visual extinction'.
- 2005 Institute of Cognitive Neuroscience, Queens Square, London, UK 'Inhibitory control in unilateral neglect and visual extinction'.
- 2005 Behavioural Brain Sciences Center, University of Birmingham, UK. 'Inhibitory control in unilateral neglect and visual extinction'.
- 2005 Beckman Institute, Caltech University, California, Los Angeles, USA. 'Inhibitory control in unilateral neglect and visual extinction'.
- 2005 St George's Hospital: In-service Program, Melbourne, Australia. Allied Health Staff lecture: 'Unilateral neglect and visual extinction'.
- 2005 School of Physiotherapy, University of Melbourne: 'Neuropsychological Disorders and Patient Rehabilitation'.

4. Press and Multimedia

Press

- 2018 Psychology Today (Feb 27). Objects Within Reach Grab Attention. A new paper compares responses to pictures of objects to the real thing.
<https://www.psychologytoday.com/us/blog/ulterior-motives/201802/objects-within-reach-grab-attention>
- 2018 Medical News Today. New study shows touch works independently of vision in object identification. <https://www.medicalnewstoday.com/mnt/releases/300690#1>
- 2017 NEVADAToday (Jan 26): NSF awards \$2.2 million to advance brain research.
<https://www.unr.edu/nevada-today/news/2017/brain-research>

- 2017 *NEVADA*Today (Dec 07). Study finds graspable objects grab attention more than images of objects do. Findings challenge notion that images are appropriate substitute for real objects. <https://www.unr.edu/nevada-today/news/2017/graspable-objects-better-than-images>
- 2016 Nevada Silver and Blue Magazine (Summer). 'Understanding how we think and behave in the real world'. https://issuu.com/nevadasilverblue/docs/nsb_summer_2016_issuu
- 2012 Discover Magazine – Neuroskeptic: Bringing the Real World into Brain Scanning. <https://www.discovermagazine.com/mind/bringing-the-real-world-into-brain-scanning>
- Multimedia
- 2017 AR in Action Summit, MIT Media Lab, Boston, MA. Neuroscience of 'Realness' | Jacqueline Snow | AR in Action. https://www.youtube.com/watch?v=M9Xzby_Mm0o
- 2017 AR in Action Summit, MIT Media Lab, Boston, MA. AR Neuroscience Panel Discussion | AR in Action. <https://www.youtube.com/watch?v=nDMNO413yQU&t=3s>

E GRADUATE STUDENT and POSTDOCTORAL TRAINING

Theses Directed:

PhD

1. Skiba, Rafal. (2016). Comparing attention and eye movements towards real objects versus image displays. Ph.D. thesis.
2. Gomez, Michael. (2020). Differences in Cognitive Processing Between Real Objects and Images. Ph.D. thesis.
3. Romero, Carissa. (2021). Identifying the Cognitive Mechanisms that Drive Real-World Food Choices. Ph.D. thesis.
4. Holler, Desiree. (2021). The Cognitive and Neural Basis of the 'Real Object Advantage' in Shape Recognition. Ph.D. thesis.
5. Fairchild, Grant. (2024). Exploring the Neural Foundations and Causal Mechanisms of Real-world Cognition. Ph.D. thesis.

Masters

1. Gomez, Michael. (2016). Physical Affordances Capture Attention. M.S. thesis.
2. Romero, Carissa. (2017). The Real Deal: Willingness-to-Pay and Satiety Expectations are Greater for Real Foods versus Their Images. M.S. thesis.
3. Holler, Desiree. (2017). Size Coding of Real-World Objects in Human Dorsal Cortex. M.S. thesis.
4. Fairchild, G. (2021). Graspability Modulates the Stronger Neural Signature of Motor Preparation for Real Objects Vs. Pictures. M.S. thesis.
5. McDonald, Kallie. (2025). Shape-Selective Areas of Human Dorsal Cortex are Sensitive Stimulus Display Format. M.S. thesis.

4th Year Honors

Honors Students – Thesis Requirement

1. Webster, M. (2015). Valuation of Objects Versus Images: The Extent to which Real Object Displays Influence Consumer Decision Making
2. Breeding, K. (2018). Using electroencephalography to compare brain responses to real objects, images, and augmented reality stimuli
3. Beattie, K. (2019). The 'Real Object Advantage' in recognition cannot be explained by stereoscopic disparity.

4. Paiva, N. (2020). What Properties Drive Differences in Visual Processing between Real Objects and Images?
5. Roach, R. (2022). 'Discriminable human gaze patterns for solid objects versus 2-D and 3-D images of those objects'

Honors Students - No Thesis Requirement

- Katia Bulatov
- Lillian Martin
- Katia Bulatov
- Benjamin Perdomo
- Arunima Chakraborty
- Chester Chau

Postdoctoral Trainees:

- Michael Gomez (7/1/2020 – 8/1/2021)
- Sara Fabbi (11/27/2019-12/31/21)
- Pedro Szybel (7/1/18-6/30/21)
- Artem Platonov (10/22/18-6/30/20)
- Francesco Marini (10/24/16 – 6/30/2019)

F TEACHING

Undergraduate:

Introduction to Research Methods

Introduction to Research Methods - Online

Graduate:

Scientific Writing

Clinical Neuropsychology

Introduction to Functional Magnetic Resonance Imaging

Object Perception

Perception and Action