

Rachel Wu

Curriculum Vitae

Department of Psychology
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Research Statement

I am a developmental cognitive neuroscientist investigating causes and barriers of cognitive growth across the lifespan with respect to learning and attention. My EEG and behavioral research from infancy to older adulthood investigates how learner factors (e.g., prior knowledge, learning approach) and environmental factors (e.g., learning from people) facilitate the selection of relevant information to promote new learning in some contexts, while being detrimental to new learning in other contexts. Cross-pollinating child development and aging research has the potential to promote cognitive growth across the lifespan.

Employment

2021-present	Associate Professor, UC Riverside <i>Riverside, CA, USA</i>
2015-2021	Assistant Professor, UC Riverside <i>Riverside, CA, USA</i>
2012-2015	NRSA Postdoctoral Fellow, University of Rochester (with Richard Aslin) <i>Rochester, NY, USA</i>
2011-2012	Postdoctoral Research Fellow, Birkbeck (with Martin Eimer & Tim Smith) <i>London, UK</i>

Education

2011	Ph.D. in Psychology Centre for Brain and Cognitive Development (CBCD), Birkbeck (BBK), University of London "Learning (to learn) from spatial attention cues during infancy", awarded May 31 2011, Supervisors: Natasha Z. Kirkham & Denis Mareschal
2011	Diploma in Art and Design The Institute, Middlesex University
2007	M.Sc. in Psychoanalytic Developmental Psychology The Anna Freud Centre, University College London Distinction on dissertation, Supervisors: Peter Fonagy, R. M. Pasco Fearon, & Saul Hillman
2006	B.S. in Psychology B.S. in History and Anthropology Carnegie Mellon University (CMU) Dean's List of High Honors (summa cum laude), Psi Chi, Thesis advisor: David H. Rakison

Major Grants (total award amount)

Pending	NSF RAPID, "Improving social connectedness, cognition, and function via learning new technology in low-income, minority older adults during the COVID-19 pandemic", Role: PI.
2023-2026	NSF, "Model-Based and Design-Based Approaches to Longitudinal Causal Decomposition Analysis" (\$273,587), Role: Co-I.
2023-2024	Pilot Interdisciplinary Collaborative Research Award as part of an NIH U54 Award, "Investigating Familial Barriers for Women in Academia" (\$48,505), Role: Co-PI.
2022-2024	JHU-RCMAR Pilot Project Award as part of an NIH P grant, "Identifying Ways to Encourage Skill Learning in Low-Income Minority Older Adults" (\$29,979), Role: PI.
2021-2024	NSF REU supplement for CAREER award to support undergraduate research (\$21,600), Role: PI.
2020-2024	NSF REU supplement for CAREER award to support undergraduate research (\$21,600), Role: PI.
2020-2024	NSF RAPID, "Older adults' learning and adaptation as resilience processes to counter social isolation during the COVID-19 pandemic" (BCS-2029575, \$132,474), Role: PI.

2020-2022	Pilot Interdisciplinary Collaborative Research Award as part of an NIH U54 Award, "Biomarkers of cognitive health disparities in minority/disadvantaged older adults" (\$26,183), Role: PI.
2019-2024	NSF CAREER Award, Science of Learning, "CAREER: Investigating the impact of learning new skills on cognitive development and motivation for functional independence in older adulthood" (BCS-1848026, \$739,002), Role: PI.
2017-2018	American Psychological Foundation's Visionary Grant, "Inducing cognitive development in aging adults" (\$20,000), Role: PI.
2013-2014	NSF workshop funding, "Learning to attend, attending to learn: Neurological, behavioral, and computational perspectives", BCS-1339060 (\$34,706), Role: PI. Co-PIs: Gedeon Deak & Richard Aslin.
2012-2015	NIH Ruth L. Kirschstein National Research Service Award (NRSA) for Individual Postdoctoral Fellows, Optimal neural and behavioral markers for learning to learn during infancy, F32HD070537 (\$148,518), Role: PI. Sponsors: Richard Aslin & Chen Yu, Collaborator: Gaia Scerif

Other Grants (total award amount)

2023-2024	UCR Committee on Research grant, "The impact of prior skills on persistence and motivation when learning new skills" (\$7000), Role: PI.
2023	UCR Center for Ideas and Society, "Discussion with Zhuqing Li and Perry Link on Daughters of the Flower Fragrant Garden: Two Sisters Separated by China's Civil War" (\$150), Role: PI.
2021-2022	UCR Committee on Research grant, "Bridging the digital divide to increase social connectedness, cognition, and function in low-income, minority older adults via intergenerational learning" (\$4500), Role: PI.
2020-2021	Pilot Interdisciplinary Research Working Group Award as part of an NIH U54 Award, "Working group on underrepresented participant recruitment barriers" (\$2,500), Role: co-I.
2020-2021	Pilot Interdisciplinary Research Working Group Award as part of an NIH U54 Award, "The contribution of hearing loss to age-related cognitive decline in the Inland Empire" (\$2,500), Role: co-I.
2019-2021	UCR Healthy Campus Project grant, "Exploring the Mental Health and Well-Being of UCR Faculty and Graduate Students: Imposter Syndrome and Beyond" (\$2000), PI: Sheffler, Role: Mentor.
2019-2020	UCR Undergraduate research mini-grant, "Probing the Nature of Same vs. Different Category Concepts" (\$300), Role: Advisor.
2019-2020	UCR Undergraduate research mini-grant, "Investigating the link between microaggressions and cognition" (\$875), Role: Advisor.
2019-2020	UCR Undergraduate research mini-grant, "Understanding the Role of Material Interestingness in Motivation to Learn" (\$750), Role: Co-Advisor.
2019-2020	UCR Regents Faculty Development Award (\$3500), Role: PI.
2018-2019	UCR Healthy Campus Project grant, "The effects of deportation-related stress on academic performance among college students in Trump's America" (\$1000), PI: Leanos, Role: PhD advisor.
2018-2019	UCR Undergraduate research mini-grant, "Investigating brain changes from learning new skills in old age" (\$700), Role: Advisor.
2018-2019	UCR Affordable Course Materials Initiative (\$3000)
2017-2018	UCR Center for Advanced Neuroscience (10 free scan hours)
2018	UCR Undergraduate research mini-grant, "Developing and validating the Broad Adult Learning Questionnaire short form" (\$500), Role: Advisor.
2017-2018	UCR Regents Faculty Fellowship (\$4000), Role: PI.
2017-2018	UCR Center for Ideas in Society Second Project Fellowship (\$6100), Role: PI.
2016-2017	UCR Affordable Course Materials Initiative (\$1500)
2016-present	UCR Omnibus Travel Grants

2012	Birkbeck Graduate Research School Generic Skills Funding for workshop (£1818)
2011-2012	British Academy Small Research Grant, Attentional Mechanisms for Learning to Learn, SG-110780 (£7,500), Role: PI. Co-PIs: Martin Eimer, Gaia Scerif, Richard Aslin
2010-2011	University of London Central Research Fund Grant, Visual Statistical Learning from Social and Nonsocial Attention Cues in a Noisy Environment (£1,678), Role: PI.
2009-2010	University of London Central Research Fund Grant, Imitation of the New, Not the Old: Mutual Exclusivity of Action Patterns (£1,993), Role: PI.
2005-2006	CMU Small Undergraduate Research Grant, Do infants associate identical labels with parts more than shapes of objects? (\$500), Role: PI.
2004-2005	CMU Small Undergraduate Research Grant, Do infants associate labels with the functional parts or the functional actions of objects? (\$500), Role: PI.

Major Awards and Honors

2023	UCR Chancellor's Award for Excellence in Undergraduate Research and Creative Achievement Faculty Award
2022	JHU-RCMAR Scientist
2020	Innovative Research on Aging Silver Award (Mather Institute)
2020	Academy of Behavioral Medicine Research Early Stage Investigator Award
2019	NSF CAREER Award
2016	NIH-NIA Butler-Williams Scholars Program
2016-now	Psychonomic Society Fellow
2015	Association for Psychological Science (APS) Rising Star
2012	Robert J. Glushko Dissertation Prize, Cognitive Science Society

Other Awards, Honors, and Scholarships

2019	National Eye Institute/Vision Sciences Society Early Career Scientist Travel Grant
2018	Beyond the Ivory Tower workshop (Templeton Foundation)
2017	17 th NIH OBSSR/NHLBI Summer Institute on Randomized Behavioral Clinical Trials
2017	UC Merced Write to Change the World: OpEd project travel award
2016	Penn State Young Scholar Speaker
2015	NIMH Summer Research Institute in Geriatric Mental Health (Weill Cornell Med College)
2014	Gordon Research Conference/Gordon Research Seminar early career funding
2014-2018	Anna Louise Baker Scholarship, Eastman School of Music
2013-2020	Marie Erhart Pearson Scholarship, Eastman School of Music
2013	Best in Show (<i>Gaia Fractals</i>), Bridge Art Gallery, Dept of Psychiatry, Rochester, NY
2013	Cognitive Science Society conference sponsorship
2012	Center for Visual Science Symposium (University of Rochester) Travel Fellowship
2011	British Psychological Society (BPS) Postdoctoral Study Visits Award
2011	BPS Postdoctoral/Lecturer Conference Bursary
2011	International Congress of Psychology 2016 logo design competition, second prize
2011	Cognitive Development Society Travel Award
2011	British Academy Overseas Conference Grant
2011	European Cognitive Science Society Best Student Paper Prize
2011	Institute of Cognitive Neuroscience (ICN) Brain Travel Grant
2011	Society for Research in Child Development (SRCD) Student Travel Award
2010	BPS Developmental Section International Collaboration Award
2010	Society for Reproductive and Infant Psychology (SRIP) postgraduate prize
2010	ICN Brain Travel Grant
2009	John Merck Fund Summer Institute on the Biology of Developmental Disabilities (Sackler)
2009	BPS Postgraduate Study Visits Award, to visit Indiana University
2009	Experimental Psychology Society (EPS) Grindley Grant, conference travel
2009	Roberts@BBK 2009 Postgraduate First Prize
2008-2010	Birkbeck International Research Studentship

2007-2010	Birkbeck Overseas Research Scholarship
2006	CMU Women's Association Scholarship
2006	CMU Meeting of the Minds Psychology Department Research Award

Publications

‡Postdoc; †Graduate student; ^ Undergraduate student

1. Ferguson, L.†, Kurum, E., Rodriguez, T.†, Nguyen, A.^, Farias, I.^, Lee, J., & **Wu, R.** (in press). Impact of community-based technology training with low-income older adults. *Aging and Mental Health*.
2. Ferguson, L.†, Sain, D.†, Kurum, E., Rebok, G., Strickland-Hughes, C. M., & **Wu, R.** (2023). Long-term cognitive effects from a real-world multi-skill learning intervention in older adults. *Aging and Mental Health*. Epub ahead of print.
3. Rodriguez, T.†, Sheffler, P., Ferguson, L., Rebok, G., & **Wu, R.** (2022). Cognitive and functional improvement via novel skill learning for low-income minority middle-aged and older adults. *Prevention Science*. Epub ahead of print.
4. Moon, A.†, Zhao, J-Y, Peters, M., & **Wu, R.** (2022). Interaction of prior category knowledge and novel statistical patterns during visual search for real-world objects. *Cognitive Research: Principles and Implications*, 7(1), 21.
5. Sheffler, P.†, Kurum, E., Bravo, D., Sheen, A.^, Ferguson, L.†, Rebok, G., Strickland-Hughes, C. M., & **Wu, R.** (2023). Growth mindset predicts cognitive gains in an older adult multi-skill learning intervention. *The International Journal of Aging and Human Development*. Epub ahead of print.
6. Moon, A.†, Ditta, A.‡, Cheung, O., & **Wu, R.** (2022). Rapid category selectivity for animals versus man-made objects: An N2pc study. *International Journal of Psychophysiology*, 171, 20-28.
7. Sheffler, P.†*, Rodriguez, T.†*, Cheung, C., & **Wu, R.** (2021). Cognitive and metacognitive, motivational, and resource considerations for learning new skills across the lifespan. *WIREs Cognitive Science*, e1585. (*equal authorship)
8. Pérez, I.†, **Wu, R.**, Bravo, D., & Murray, C. B. (2021). An interdisciplinary framework examining culture and adaptation in migrant children and adolescents. *New Directions for Child and Adolescent Development*, 176, 13-39.
9. **Wu, R.**, Kurum, E., Ahmed, C.^, Sain, D.†, & Aslin, R. N. (2021). Categorization in infancy based on novelty and co-occurrence. *Infant Behavior and Development*, 62, 101510.
10. **Wu, R.**, Zhao, J., Cheung, C., Natsuaki, M., Rebok, G., & Strickland-Hughes, C. (2021). Learning as an important privilege: A lifespan perspective with implications for successful aging. *Human Development*, 65, 51-64.
11. Ferguson, L.^, Ahmed, C.^, Dang, C.^, & **Wu, R.** (2020). Neural target selection as a marker of familiarity during search for perceptually distinct objects. *European Journal of Neuroscience*, 53(5), 1517-1532.
12. Ditta, A.‡, Strickland-Hughes, C., Cheung, C., & **Wu, R.** (2020). Exposure to information increases motivation to learn more. *Learning and Motivation*. Epub ahead of print
13. Hoemann, K.*, **Wu, R.***, LoBue, V.*, Oakes, L.*, Xu, F., & Feldman Barrett, L.* (2020). Developing an understanding of emotion categories: Lessons from objects. *Trends in Cognitive Sciences*, 24(1), 39-51. (*equal authorship)
14. Nguyen, C.^, Leanos, S.†, Natsuaki, M., Rebok, G., & **Wu, R.** (2020). Adaptation for growth via learning new skills as a means to long-term functional independence in older adulthood: Insights from emerging adulthood. *The Gerontologist*, 60(1), 4-11.
15. Leanos, S.†, Kurum, E., Strickland-Hughes, C., Ditta, A.‡, Nguyen, G.^, Felix, M.^, Yum, H.^, Rebok, G. W., & **Wu, R.** (2020/2023). The impact of learning multiple real-world skills on cognitive abilities and functional independence in healthy older adults. *Journals of Gerontology: Series B Psychological Sciences*. Epub ahead of print. (*republished due to correction)
16. **Wu, R.**, & Strickland-Hughes, C. (2019). Adaptation for growth as a common goal throughout the lifespan: Why and how. *Psychology of Learning and Motivation*, 71, 387-414.
17. van Bergen, G.‡, Flecken, M., & **Wu, R.** (2019). Rapid target selection of object categories based on verbs: Implications for language-categorization interactions. *Psychophysiology*, 56(9), e13395.
18. **Wu, R.** (2019). Learning what to learn across the lifespan: From objects to real-world skills. *Current Directions in Psychological Science*, 28(4) 392-397.

19. **Wu, R.**, Qian, T., & Aslin, R. N. (2019). No evidence that abstract structure learning disrupts novel-event learning in 8- to 11-month-olds. *Frontiers in Psychology*, 10, 498.
20. Leanos, S.†, Coons, J. †, Rebok, G. W., Ozer, D. J., & **Wu, R.** (2019). Development of the Broad Learning Adult Questionnaire. *The International Journal of Aging and Human Development*, 88(3), 286-311.
21. Bayet, L., Zinszer, B., Pruitt, Z.⁠, Aslin, R. N., & **Wu, R.** (2018). Dynamics of neural representations when searching for human and non-human faces. *Scientific Reports*, 8, 13277.
22. **Wu, R.**, Shimi, A., Solis, M., & Scerif, G. (2018). Learning what to attend to: From the lab to the classroom. *Journal of Cognitive Neuroscience*, 30(12), 1749-1756.
23. **Wu, R.**, McGee, B.†, Rubenstein, M.⁠, Pruitt, Z.⁠, Cheung, O., & Aslin, R. N. (2018). Emergence of the benefits and costs of grouping for visual search. *Psychophysiology*, 55(9), e13087.
24. **Wu, R.**, McGee, B.†, Echiverri, C.⁠, & Zinszer, B. (2018). Prior knowledge of category size impacts visual search. *Psychophysiology*, 55(8), e13075.
25. Quiñones-Camacho, L.†, **Wu, R.**, & Davis, E. L. (2018). Motivated attention to fear-related stimuli: Evidence for the enhanced processing of fear in the Late Positive Potential. *Motivation and Emotion*, 42(2), 299-308.
26. Lin, F., Wang, X., **Wu, R.**, Rebok, G., & Chapman, B. (2017). Identification of successful cognitive aging in the Alzheimer's Disease Neuroimaging Initiative Study. *Journal of Alzheimer's Disease*, 59(1), 101-111.
27. **Wu, R.**, & Zhao, J. (2017). Prior knowledge of object associations shapes attentional templates and information acquisition. *Frontiers in Psychology*, 8(843), 1-6.
28. Xiao, N. G.*, **Wu, R.***, Quinn, P. C., Liu, S., Tummeltshammer, K. S., Kirkham, N. Z., Ge, L., Pascalis, O., & Lee, K. (2017). Infants rely more on social cues from own-race than other-race adults for learning under uncertainty. *Child Development*, e229-e244. (*co-first author)
29. **Wu, R.**, & Zhao, J. (2017). The "item" as a window into how prior knowledge guides visual search. *Behavioral and Brain Sciences*, 40, e162.
30. **Wu, R.**, Rebok, G. W., & Lin, F. V. (2017). A novel theoretical life course framework for triggering cognitive development across the lifespan. *Human Development*, 56(6), 342-365.
31. **Wu, R.**, Pruitt, Z.⁠, Zinszer, B., & Cheung, O. (2017). Increased experience amplifies the activation of task-irrelevant category representations. *Attention, Perception, and Psychophysics*, 79(2), 522-532.
32. **Wu, R.**, Pruitt, Z.⁠, Runkle, M.⁠, Scerif, G., & Aslin, R. N. (2016). A neural signature of rapid category-based target selection as a function of intra-item perceptual similarity despite inter-item dissimilarity. *Attention, Perception, and Psychophysics*, 78(3), 749-76.
33. **Wu, R.**, Nako, R., Band, J.⁠, Pizzuto, J.⁠, Shadravan, Y.⁠, Scerif, G., & Aslin, R. N. (2015). Rapid selection of non-native stimuli despite perceptual narrowing. *Journal of Cognitive Neuroscience*, 27(11), 2299-2307.
34. Papageorgiou, K. A., Smith, T. J., **Wu, R.**, Johnson, M. H., Kirkham, N. Z., & Ronald, A. (2014). Individual differences in infant fixation duration relate to child attention and behavioral control in childhood. *Psychological Science*, 25(7), 1371-1379.
35. Tummeltshammer, K. A., **Wu, R.**, Sobel, D., & Kirkham, N. Z. (2014). Infants track the reliability of potential informants. *Psychological Science*, 25(9), 1730-1738.
36. Nako, R., **Wu, R.**, & Smith, T. J., & Eimer, M. (2014). Item and category-based attentional control during search for real-world objects: Can you find the pants among the pans? *Journal of Experimental Psychology: Human Perception and Performance*, 40(4), 1283-1288.
37. **Wu, R.**, Tummeltshammer, K. S., Gliga, T., & Kirkham, N. Z. (2014). Ostensive signals support learning from novel attention cues during infancy. *Frontiers in Psychology*, 5:251.
38. Nako, R.*, **Wu, R.***, & Eimer, M. (2014). Rapid guidance of visual search by object categories. *Journal of Experimental Psychology: Human Perception and Performance*, 40(1), 50-60. (*co-first author)
39. Lloyd-Fox, S., **Wu, R.**, Richards, J., Elwell, C., & Johnson, M. H. (2013). Cortical activation to action perception is associated with action production abilities in young infants. *Cerebral Cortex*.
40. **Wu, R.**, Scerif, G., Aslin, R. N., Smith, T. J., Nako, R.⁠, & Eimer, M. (2013). Searching for something familiar or novel: Top-down attentional selection of specific items or object categories. *Journal of Cognitive Neuroscience*, 25(5), 719-729.

41. Yurovsky, D., Hidaka, S., & **Wu, R.** (2012). Quantitative Linking Hypotheses for Infant Eye Movements. *PLoS One*, 7(10), e47419.
42. Kirkham, N. Z., Richardson, D. C., **Wu, R.**, & Johnson, S. P. (2012). The importance of ‘what’: Infants use featural information to index events. *Journal of Experimental Child Psychology*, 113(3), 430-439.
43. Karmiloff-Smith, A., Broadbent, H., Farran, E. K., Longhi, E., D’Souza, D., Metcalfe, K., Tassabehji, M., **Wu, R.**, Senju, A., Happe, F., Turnpenny, P., & Sansbury, F. (2012). Social Cognition in Williams Syndrome: Insights from Partial Deletion Patients. *Frontiers in Developmental Psychology*, 3:168. doi: 10.3389/fpsyg.2012.00168
44. Morse, A., Hannagan, T., & **Wu, R.** (2012). Bring on the loop! Commentary on Rohlfing, K. J. & Wrede, B.: What Novel Scientific and Technological Questions Developmental Robotics Bring to HRI? Are we Ready for a Loop? *IEEE Transactions on Autonomous Mental Development*, 9, 10-11.
45. **Wu, R.**, Gopnik, A., Richardson, D. C., & Kirkham, N. Z. (2011). Infants learn about objects from statistics and people. *Developmental Psychology*, 47(5), 1220-1229.
46. **Wu, R.**, Mareschal, D., & Rakison, D. H. (2011). Attention to multiple cues during spontaneous object labeling. *Infancy*, 16(5), 545–556.
47. **Wu, R.**, & Kirkham, N. Z. (2010). No two cues are alike: Depth of learning during infancy is dependent on what orients attention. *Journal of Experimental Child Psychology*, 107, 118-136.

Manuscripts under review/in prep

‡Postdoc; †Graduate student; ^ Undergraduate student

1. Kyeong, Y.†, Kurum, E., Ferguson, L.†, Sheffler, P.†, Rebok, G., & **Wu, R.** (under review). Long-term effects of a real-world multi-skill intervention on older adults’ growth mindset.
2. Rodriguez, T.† & **Wu, R.** (under review). Learning barriers, engagement, and interests among low-income Latino older adults: Highlighting the privilege of learning and retirement.
3. Rodriguez, T.†, Ferguson, L.†, Nguyen, A.^, Lee, J., & **Wu, R.** (in prep). Providing technology access and support for diverse older adults with low income via a collaborative community program.
4. Azer, L.†, Kurum, E., Ferguson, L., Davis, E. L., Zhang, W., Strickland-Hughes, C. M., & **Wu, R.** (in prep). Subjective executive functioning and skill learning during the COVID-19 pandemic associated with perceived loneliness, depressive symptoms, and well-being.
5. Ditta, A.‡, Cheung, C., Strickland-Hughes, C., & **Wu, R.** (in prep). Knowledge exposure as a means of motivating young adults to learn broadly: A framework for undergraduate education.

Popular press articles

1. **Wu, R.**, & Church, J. A. (2023). To stay sharp as you age, learn new skills. *Scientific American*.
2. **Wu, R.**, & Strickland-Hughes, C. M. (2019). Think you're too old to learn new tricks? *Scientific American*.
3. **Wu, R.** (2017). Six secrets infants can teach us about learning. *Scientific American*.
4. **Wu, R.** (2013). Learning from learners. *The Psychologist*, 26(2), 550-551.

Chapters, proceedings, and encyclopedia articles

1. Rebok, G.* , Rodriguez, T.†*, & **Wu, R.** (2023). Resilient Cognitive aging in Latinx and Mexican American populations. In J. Angel, F. Andrade, S. Mejia Arango, & F. Riosmena, *Aging in the Americas*, pp.XXX-XXX. Springer Nature. (*co-first author)
2. **Wu, R.**, & Rebok, G. (2020). Maximizing the impact of cognitive engagement interventions. In A. Thomas & A. Gutches, *Handbook of Cognitive Aging: A Life Course Perspective*, pp.685-700. Cambridge University Press.
3. McGee, B.†, & **Wu, R.** (2020). Attention. *Essays in Developmental Psychology*.
4. McGee, B.†, & **Wu, R.** (2020). Learning. *Essays in Developmental Psychology*.
5. McGee, B.†, & **Wu, R.** (2020). Vision in infants. *Essays in Developmental Psychology*.
6. **Wu, R.** (2020). Brain plasticity. *Essays in Developmental Psychology*.
7. **Wu, R.** (2020). Leisure activities. *Essays in Developmental Psychology*.
8. **Wu, R.** (2020). Lifelong learning. *Essays in Developmental Psychology*.
9. **Wu, R.** (2020). Lifespan development. *Essays in Developmental Psychology*.

10. **Wu, R.** (2018). Cross-pollination in cognitive development. In M. H. Bornstein, M. E. Arterberry, K. L. Fingerman, & J. E. Lansford (Eds.) *SAGE Encyclopedia of Lifespan Human Development* (pp. 490-492). Thousand Oaks, CA: SAGE.
11. **Wu, R.,** & Hannagan, T. (2018). Learning. In M. H. Bornstein, M. E. Arterberry, K. L. Fingerman, & J. E. Lansford (Eds.) *SAGE Encyclopedia of Lifespan Human Development* (pp. 1258-1260). Thousand Oaks, CA: SAGE.
12. **Wu, R.,** & Scerif, G. (2018). Attention. In M. H. Bornstein, M. E. Arterberry, K. L. Fingerman, & J. E. Lansford (Eds.) *SAGE Encyclopedia of Lifespan Human Development* (pp. 176-178). Thousand Oaks, CA: SAGE.
13. Scerif, G., & **Wu, R.** (2014). Developmental Disorders. In A.C. Nobre & S. Kastner (Eds.) *The Oxford Handbook of Attention* (pp. 893-926). Oxford: OUP.
14. Swan, K. A., **Wu, R.,** & Kirkham, N. Z. (2013). 8-month-olds know which face is reliable. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society*. Berlin, Germany: Cognitive Science Society.
15. **Wu, R.,** & Kirkham, N. Z. (2012). Learning (to learn) from spatial attention cues during infancy. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 1161-1166). Sapporo, Japan: Cognitive Science Society.
16. Yurovsky, D., Hidaka, S., & **Wu, R.** (2012). Quantitative Linking Hypotheses for Infant Eye Movements. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society*. Sapporo, Japan: Cognitive Science Society.
17. Hannagan, T., & **Wu, R.** (2011). Cued multimodal learning in infancy: A neuro-computational model. In C. Hoelscher, T. F. Shipley, & L. Carlson (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society*. Boston, MA: Cognitive Science Society.
18. Yurovsky, D., **Wu, R.,** Yu, C., Kirkham, N. Z., & Smith, L. B. (2011). Model selection for eye movements: assessing the role of attentional cues in infant learning. In E. J. Davelaar (Ed.), *Connectionist models of neurocognition and emergent behavior: From theory to applications* (pp. 58-75). Singapore: World Scientific.
19. **Wu, R.,** Kirkham, N. Z., Swan, K. A., & Gliga, T. (2011). Social signals scaffold learning from novel cues during infancy. In B. Kokinov, A. Karmiloff-Smith, & N. Nersessian (Eds.), *Proceedings of the European Conference on Cognitive Science*. Sofia, Bulgaria: New Bulgarian University Press. Awarded Best Student Paper Prize.
20. **Wu, R.,** Gopnik, A., Richardson, D. C., & Kirkham, N. Z. (2010). Social cues support learning about objects from statistics in infancy. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 1228-1233). Portland, OR: Cognitive Science Society.

Select Recent Conference Presentations

‡Postdoc; †Graduate student; ^Undergraduate student

1. Rodriguez, T.† & **Wu, R.** (2023, Nov). Voices of low-income Latino older adults: What are their perceived learning impediments? Poster submitted to the Gerontological Society of America conference.
2. Ferguson, L.†, Kurum, E., Rebok, G., & **Wu, R.** (2023, April). Simultaneous skill learning interventions with older adults: Changes in cognitive performance across three studies. Talk presented at the Western Psychological Conference. **Awarded Student Travel Award.**
3. Rodriguez, T.† & **Wu, R.** (2023, April). Identifying barriers to learning novel skills among low-income Latinx older adults. Talk presented at the Western Psychological Conference.
4. Azer, L.†, Salinas, I.Q.†, Kurum, E., Ferguson, L., Davis, E.L., Zhang, W., Strickland-Hughes, C.M., & **Wu, R.** (2023, April). Subjective executive functioning and skill learning during the COVID-19 pandemic associated with loneliness, depressive symptoms, and well-being. Talk presented at the Western Psychological Conference.
5. Nguyen, A.^, Ferguson, L.†, & **Wu, R.** (2023, April). Increased growth mindset from a community-based technology intervention for low-income older adults. Poster presented at the Western Psychological Conference.

6. Ferguson, L.†, Kurum, E., Rebok, G., & **Wu, R.** (2023, Feb). Long-term cognitive gains from learning three new skills simultaneously in older adults. Poster presented at the Dallas Aging and Cognition Conference. **Awarded Student Travel Award.**
7. Rodriguez, T.† & **Wu, R.** (2023, Feb). What prevents low-income Latinx older adults from staying cognitively engaged via novel skill learning? Poster presented at the Dallas Aging and Cognition Conference. **Awarded Student Travel Award.**
8. Sheffler, P.†, Kurum, E., Rebok, G., Strickland-Hughes, C. M., & **Wu, R.** (2021, Nov). The impact of growth mindset on older adults' cognitive functioning in a multi-skill learning intervention. Talk presented at the Gerontological Society of America conference.
9. Ferguson, L.†, Sain, D., Kurum, E., Rebok, G., Strickland-Hughes, C. M., & **Wu, R.** (2021, Nov). Long-term cognitive effects from a real-world multi-skill learning intervention in older adults. Talk presented at the Gerontological Society of America conference.
10. Kyeong, Y.†, Sheffler, P.†, Kurum, E., Cheung, C., Davis, L., Strickland-Hughes, C. M., & **Wu, R.** (2021, Nov). Growth mindset and older adults' well-being during the COVID-19 pandemic. Talk presented at the Gerontological Society of America conference.
11. Azer, L.†, Kurum, E., Ferguson, L., Davis, E. L., Zhang, W., Strickland-Hughes, C. M., & **Wu, R.** (2021, Nov). Older adults' engagement in cognitively stimulating activities prior to the COVID-19 pandemic predicts perceived loneliness during the pandemic. Talk presented at the Gerontological Society of America conference.
12. Sheffler, P.†, Kurum, E., Rebok, G., Strickland-Hughes, C. M., & **Wu, R.** (2021, April). Growth mindset predicts cognitive gains in an older adult multi-skill learning intervention. Talk presented at the Western Psychological Society conference. **Awarded Student Research Award.**
13. **Wu, R.** (2020, Oct). Learning what to learn across the lifespan. Invited keynote address at the Western Psychological Association conference, online.
14. Flores, J.⁠, Alvarado, P.⁠, Munoz, R.⁠, Ferguson, L.⁠, **Wu, R.** (2020, Oct). Microaggressions may relate to poorer well-being, but do not affect cognitive abilities. Poster presented at the Western Psychological Association conference, online.
15. Moon., A.†, Dang, C.⁠, Hester, G⁠, Durrett, L.⁠, Duong, A.⁠, Ferguson, L.⁠, Peters, M., & **Wu, R.** (2020, June). Investigating N2pc effects with the use of prior knowledge and novel information in visual search. Poster presented at the virtual Vision Sciences Society conference.
16. Moon., A.†, Xe, C., Ditta, A.‡, Cheung, O., & **Wu, R.** (2020, May). Rapid category selectivity for animal versus man-made objects: an N2pc study. Poster presented at the virtual Cognitive Neuroscience Society conference.
17. Ferguson, L.⁠, Ahmed, C.⁠, Dang, C.⁠, & **Wu, R.** (2020, April). Rapid target selection of object categories depends on subtle differences in familiarity. Poster accepted at the Cognitive Aging Conference, Atlanta, GA, conference cancelled.
18. Leanos, S.†, Kurum, E., Strickland-Hughes, C., Ditta, A.‡, Rebok, G. W., & **Wu, R.** (2019, June). The impact of learning multiple real-world skills on cognitive abilities and functional independence in healthy older adults. Talk presented at SARMAC, Cape Cod, MA.
19. Flores, J. J., Bennett, I. J., **Wu, R.**, & Firat, R. (2019, May). A psychological wellbeing comparison between Hispanic and Non-Hispanic older adults. Poster presented at the UCLA Aging conference, Los Angeles, CA, USA.
20. Leanos, S.†, Kurum, E., Strickland-Hughes, C., Ditta, A.‡, Rebok, G. W., & **Wu, R.** (2019, April). The impact of learning multiple real-world skills on cognitive abilities and functional independence in healthy older adults. Talk presented at the International Conference Aging and Cognition, Zurich, Switzerland.
21. van Bergen, G., Flecken, M., & **Wu, R.** (2018, September). Searching for the label advantage in perception: to what extent do verbal categories facilitate visual search? Poster presented at the Architectures and Mechanisms for Language Processing conference, Berlin, Germany.
22. **Wu, R.**, Rebok, G., & Leanos, S. (2018, August). Why learning new artistic/creative skills may increase cognitive functioning across the lifespan. Talk presented at the American Psychological Association conference, San Francisco, CA.

23. Peralta, S.[^], Leanos, S.[†], Coons, J., Rebok, G., & **Wu, R.** (2018, May). Developing the Broad Adult Learning Questionnaire Short Form (BLAQ-S). Poster presented at the UCR undergraduate research symposium.
24. Leanos, S.[†], Coons, J., Rebok, G., & **Wu, R.** (2018, May). Investigating the relationship between broad learning and fluid abilities in older adulthood. Poster presented at the American Psychological Association conference, San Francisco, CA.
25. Leanos, S.[†], Coons, J., Rebok, G., & **Wu, R.** (2018, May). Broad learning is related to cognitive abilities in older adulthood. Poster presented at the Cognitive Aging Conference, Atlanta, GA.
26. Strickland-Hughes, C. & **Wu, R.** (2018, April). Maximizing the impact of cognitive interventions. Symposium presented at the International Learning and Memory Conference, Huntington Beach, CA.
27. Leanos, S.[†], Coons, J., Rebok, G., & **Wu, R.** (2018, April). The relationship between broad learning and cognitive abilities. Poster presented at the International Learning and Memory Conference, Huntington Beach, CA.
28. Bayet, L., Zinszer, B., Saville, A., Aslin, R. N., Bales, B., & **Wu, R.** (2018, March). Probing the time-course of face representations with time-resolved multivariate pattern analyses of EEG signals. Poster presented at the Cognitive Neuroscience Society annual conference, Boston, MA.
29. Felix, M.[^], Leanos, S.[†], Coons, J., Rebok, G., & **Wu, R.** (2018, February). The relationship between learning environment and cognitive functioning. Poster presented at the California Alliance for Minority Participation, Irvine, CA. ***Received Honorable Mention Award***
30. Leanos, S.[†], Coons, J., Rebok, G., Ozer, D., & **Wu, R.** (2017, July). Developing and validating the lifestyle cognitive development questionnaire. Poster presented at the 21st IAGG World Congress of Gerontology and Geriatrics, San Francisco, CA.
31. **Wu, R.**, Rebok, G., & Lin, F. V. (2017, July). Six factors to trigger cognitive development across the lifespan: A new theoretical framework. Poster to be presented at the IAGG World Congress of Gerontology and Geriatrics, San Francisco, CA.
32. McGee, B.[†], Ecchiveri, C.[^], Zinszer, B., & **Wu, R.** (2017, May). Category supersedes identity in visual search: Attentional templates reflect participants' category knowledge in both item and set searches. Poster presented at the Vision Sciences Society, St. Pete, FL.
33. Bayet, L., Zinszer, B., **Wu, R.**, & Aslin, R. N. (April 2017). Multivariate analysis of EEG for face perception development research. Talk presented at the Face Processing pre-conference, SRCD, Austin, TX.
34. Leanos, S.[†], Coons, J., Rebok, G., Ozer, D., & **Wu, R.** (March 2017). A new measure for lifespan creative engagement: Development and validation. Poster presented at the Society for the Neuroscience of Creativity, San Francisco, CA.
35. McGee, B.[†], Ecchiveri, C.[^], Zinszer, B., & **Wu, R.** (2017, March). Prior knowledge of category size impacts search. Poster presented at the Cognitive Neuroscience Society, San Francisco, CA.
36. **Wu, R.**, Rebok, G. W., & Lin, F. V. (2017, Jan). A novel theoretical life course framework for triggering cognitive development across the lifespan. Poster presented at the Dallas Aging and Cognition Conference, Dallas, TX.
37. **Wu, R.**, Rebok, G., & Lin, F. V. (2016, Nov). A new framework on lifespan cognitive development. Talk presented at the Gerontological Society of America, New Orleans, LA.
38. Xiao, N. G., Quinn, P. C., Liu, S., **Wu, R.**, Tummeltshammer, K. S., Kirkham, N. Z., Ge, L., Pascalis, O., Lee, K. (2016, May). Emergence of implicit racial bias in infants: Convergent evidence. Talk presented at the International Congress on Infant Studies biannual meeting, New Orleans, LA.
39. **Wu, R.**, Pruitt, Z.[^], Zinszer, B., & Cheung, O. (2016, May). Increased experience amplifies rapid task-irrelevant attentional capture. Talk presented at the Vision Sciences Society, Naples, FL.
40. **Wu, R.**, Scerif, G., & Aslin, R. N. (2016, May). The emergence of the costs and benefits of grouping during visual search. Poster presented at the Vision Sciences Society, Naples, FL.
41. **Wu, R.** (2016, May). The costs and benefits of chunking during visual search. Talk presented at the International Meeting of the Psychonomic Society, Granada, Spain.
42. **Wu, R.**, Hannagan, T., & Lin, F. V. (2016, April). CALLA: A new framework on lifespan cognitive development. Poster presented at the Cognitive Aging Conference, Atlanta, GA.

43. **Wu, R.,** & Lin, F. (2015, Nov). Distraction from novel information vs. existing knowledge in aging adults. Poster presented at the Gerontological Society of America, Orlando, FL.
44. Ren, P., **Wu, R.,** Mapstone, M., & Lin, F. (2015, July). Altered functional connectivity of prefrontal cortex underpins the abnormality of intra-individual variability in reaction time in mild cognitive impairment. *Journal of the Alzheimer's Association*, 11(7), P885–P886.
45. **Wu, R.,** Pruitt, Z.[^], Runkle, M.[^], Meyer, K.[^], Scerif, G., & Aslin, R. N. (2015, May). Feature correlation guidance in category visual search. Talk presented at the Vision Sciences Society, St. Pete, FL.
46. **Wu, R.,** Pruitt, Z.[^], Runkle, M.[^], Meyer, K.[^], Scerif, G., & Aslin, R. N. (2015, March). Feature correlation modulates category guidance during visual search. Poster to be presented at the Cognitive Neuroscience Society, San Francisco, CA.
47. Tummeltshammer, K., **Wu, R.,** & Kirkham, N. Z. (2015, March). Infant statistical learners attend selectively to patterned over random visual objects. Poster presented at the Society for Research in Child Development biannual meeting, Philadelphia, PA.

Workshop/Conference Organization

2019-2020	Aging faculty research workshops at UCR, Riverside, CA, USA
2015-2017	EEG methods workshop, Riverside, CA, USA (funder: Brain Vision)
2013/11	Learning to Attend, Attending to Learn: Neurological, Behavioral, and Computational Perspectives on Development, San Diego, CA, USA (funders: NSF, CogSci, Brain Vision)
2012/07	International Conference of Thinking (ICT 2012) – co-organized volunteer team, Birkbeck, London
2012/03	Gaze, Bias, Learning II: Linking Computation, Neuroscience, and Cognitive Development; Tamagawa University, Tokyo (funder: gCOE-Tamagawa)
2012/01	Gaze, Bias, Learning: Linking Computation, Neuroscience, and Cognitive Development (afternoon workshop); How to get ahead in academia in 5 countries (morning workshop); Birkbeck, London (funder: BBK GRS fund)
2010/10	First PhD graduation seminar event at Birkbeck, Discussant: Albert Yonas (funder: BBK psych dept)

Teaching and Mentoring

Introduction to Psychology, Lifespan Development, Research Methods in Developmental Psychology, Attention and Learning Interactions, Bridging Cognitive Development and Cognitive Aging, Cognitive Foundations of Behavior, Laboratory in Development and Learning

Postdocs:

- Annie Ditta, UC Riverside, Assistant Professor of Teaching

Graduate students mentored:

- Shirley Leanos, Riverside County Business Process Analyst
- Austin Moon, UC Riverside
- Brianna McGee, UC Riverside
- Leah Ferguson, UC Riverside
- Tania Rodriguez, UC Riverside
- Christopher Casey, UC Riverside
- Pamela Sheffler, Landmark College, Assistant Professor (co-mentored)
- Lilian Azer, UC Irvine, Postdoc (co-mentored)
- Laura Quiñones-Camacho, UT Austin, Assistant Professor (co-mentored)
- Yena Keong, UC Riverside (co-mentored)
- Tina Vo, UC Riverside (co-mentored)
- Isabela Perez, UC Riverside (co-mentored)
- Undergraduate mini grant advisor (2016-present)
- Mentoring Summer Research Internship Program/RISE/MARC-U advisor (2016-present)
- UCR Women's Faculty Association Mentoring Chair (2017-present)
- Undergraduate Honors Program advisor (2016-present)

Professional Service and Mentoring

- APA Div 20 Secretary (2023-2026)
- NIH panel reviewer, ad-hoc for Sensory, Perceptual, and Cognitive Processes; ad-hoc for Cognition and Perception (2019, 2020)
- NSF panel reviewer for Developmental Science and Science of Learning, and GRFPs (2016, 2017, 2019, 2020, 2023)
- Deutsche Forschungsgemeinschaft (DFG – NSF equivalent in Germany) panelist (2018, 2020, 2022)
- APA Div 7 and Div 20 mentor
- Associate Editor: Journal of Experimental Psychology: General (2022-present)
- Editorial Board: Acta Psychologica (2021-present)
- Reviewer: ICIS, SRCD, CogSci, EuroCogSci conferences. Ad hoc reviewer for *Biological Psych*, *British Journal of Dev Psych*, *Cognition*, *Developmental Psych*, *Developmental Sci*, *Frontiers*, *Infancy*, *Journal of Cog Sci*, *JECP*, *PeerJ*, *Psychonomic Bulletin and Review*, *PLoS One*, *Proceedings of the Royal Society B: Biological Sciences*, *American Journal of Psychology*, *Quarterly Journal of Exp Psych*.
- UCR Psychology Graduate Grants Coordinator (2022-present)
- UCR Committee on Research (2022-2025); UCR Course Scheduling Committee (2019-2021)
- Co-Chair University of Rochester PostDoc Association (2013-2014)

Select Invited Talks/Lectures (since 2012)

2023	RWTH Aachen University
2023	Heinrich Heine University Düsseldorf
2023	University of Gothenburg
2023	TEDx UCR
2020	UCLA
2019	Claremont Graduate University
2019	Birkbeck, University of London
2019	University of Oxford
2019	NYU Abu Dhabi
2019	UC Irvine
2018	UCR Osher Risky Business (Riverside and Palm Desert talks)
2018	UCR Veterans, Military Members, and Families Group Luncheon
2018	UCR Health and Wellness
2018	UCR Citizen University Committee
2017	UCR Office of Research Integrity
2017	UC San Diego, Department of Psychology
2017	UC Merced
2017	Johns Hopkins University
2017	AARP
2016	Claremont Graduate University
2016	UCI Institute for Memory Impairments and Neurological Disorders, distinguished speaker
2016	Penn State Young Scholar Speaker Series
2015	UCR, Discover Day
2015	UCLA, Department of Psychology
2015	UC San Diego, Division of Geriatric Psychiatry
2015	'Learning to see' – U of R Medical Center/Memorial Art Gallery
2015	'Building Your Future' career talk – CMU
2012-2014	'Writing a Strong CV', 'Career Opportunities' – BBK, Rochester
2013	Carnegie Mellon University
2013	University of Rochester, Cognitive Development Lecture
2013	University of Toronto
2012	University of Rochester, Cognitive Science lecture (developmental methods)
2012	University of Salzburg
2012	Indiana University

2012 Osaka University, Kyoto University, Primate Research Institute
 2012 EEG Research Methods, BBK
 2012 Developmental Research Methods, BBK

Design

Editor, UCR Psychology Department Newsletter (2017-present)
 Callalab.com; Lifespan.ucr.edu
 Logo: International Conference on Development and Learning 2012, San Diego, CA, USA
 Logo: XXXI International Congress of Psychology 2016, Yokohama, Japan, second prize (September, 2011)
 Logo: Genes Environment Lifespan Lab, BBK (August, 2011)
 David E. Rumelhart prize medallion (with David Waller): *Cognitive Science Society* (2010-present)
 Logo and book cover: 12th Neural Computation and Psychology Workshop (April, 2010)
 Cover art: Gershkoff-Stowe, L., & Rakison, D. H. (Eds.), (2005). *Building object categories in developmental time*. Hillsdale, NJ: Erlbaum

Select Dissemination/Publicity/Outreach (since 2012)

2018-present Feature in *The New York Times*, *Elle*, *TIME*, *NBC News*, *The New Yorker*
 2018 Inland Empire Caregiver Conference keynote
 2017, 2020 Generation Bold radio interview
 2017 Riverside County Elder Abuse Symposium: Keynote speaker
 2017-present UCR Psychology department newsletter, Editor
 2017 Riverside Healthy Jurupa Valley Collaborative meeting invited speaker
 2017 Riverside County Office on Aging invited talk
 2017 New York Observer interview on "chunking" working memory and attention
 2017 UCR Osher Lifelong Learning Institute invited talk
 2015-present 2 press releases for published articles
 2015 Yahoo Parenting: Interview on nature vs. nurture
 2015 Press Enterprise: Interview on coloring books
 2015 Xerox teleconference featured speaker: Cost savings, lower attrition, higher performers
 2015 American Society for Training and Development featured speaker on adult learning
 2014 Indian Community Center Professional Forum featured speaker on creative aging
 2014 Feature in Fall courses brochure, Memorial Art Gallery
 2014 "Choosing Yes over No", UR Postdoc Association newsletter (Vol. 4)
 2012 Feature in Rochester Democrat and Chronicle Arts Community Blog, Rochester, NY