

Jennifer L. Crawford

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Current Position

Postdoctoral Fellow, Neurochemistry & Cognition Lab 2023-present
Mentor: Anne Berry

Education

B.S., Neuroscience, Brandeis University (*Highest Honors*) 2015
M.A., Psychological & Brain Sciences, Washington University 2019
Ph.D., Psychological & Brain Sciences, Washington University (Advisor: Todd Braver) 2022

Previous Research Positions

Research Assistant, Brandeis University (PI: Angela Gutchess) 2012-2015
Research Assistant, Yale University (PI: Gregory Samanez-Larkin) 2015-2017

Awards & Honors

Joel Friedland '76 Endowed Scholarship 2014
Provost's Undergraduate Research Fund Summer Research Fellowship 2014
Aging & Development Training Fellowship (T32) 2018-2021
Sallie P. Asche Travel Award, Dallas Aging & Cognition Conference 2019
Summer School in Social Neuroscience and Neuroeconomics, Fellow 2019
Cognitive, Computational, & Systems Neuroscience Training Fellowship (T32) 2021-2022
Outstanding Teaching Assistant Award (WUSTL Psychological & Brain Sciences) 2021
Dissertation Research Award (WUSTL Psychological & Brain Sciences) 2021
Kavli Summer Institute in Cognitive Neuroscience, Fellow 2022
Dean's Award for Graduate Research Excellence 2022
Sallie P. Asche Travel Award, Dallas Aging & Cognition Conference 2023
Postdoctoral Neuroscience Training Fellowship (T32) 2023-present

Research Support

Crawford (PI) 6/1/2019–3/31/2022
Cognitive effort and aging. Pilot project examining cognitive effort using a combination of neuroimaging, behavioral, and experience sampling techniques.
Role: Subaward PI (on R24-AG054355)
Direct Costs: \$30,000

Publications

Crawford, J.L., English, T., & Braver, T.S. (In Press). Cognitive effort-based decision-making across experimental and daily life indices in younger and older adults. *Journal of Gerontology: Psychological Sciences*.

Crawford, J. L., Eisenstein, S. A., Peelle, J. E. & Braver, T. S. (2022). Domain-general cognitive motivation: Evidence from economic decision-making – Final Registered Report. *Cognitive Research: Principles and Implications*, 7(1), 23.

Crawford, J.L., English, T., & Braver, T.S. (2022). Incorporating Ecological Momentary Assessment into multimethod investigations of cognitive aging: Promise and practical considerations. *Psychology and Aging*, 37(1), 84–96.

Yee, D. M., **Crawford, J. L.** & Braver, T. S. (2022). An fMRI protocol for administering liquid incentives to human participants. *Star Protocols*, 3(4), 101707.

Yee, D.M., **Crawford, J.L.**, Lamichhane, B., & Braver, T.S. (2021). Dorsal anterior cingulate cortex encodes the subjective motivational value of cognitive task performance. *Journal of Neuroscience*, 41(16), 3707–3720.

Crawford, J.L., Yee, D.M., Hallenbeck, H.W., Naumann, A., Shapiro, K., Thompson, R.J., & Braver, T.S. (2020). Dissociable effects of monetary, liquid, and social incentives on motivation and cognitive control. *Frontiers in Cognition*, 11, 2212.

Castrellon, J. J., Seaman, K. L., **Crawford, J. L.**, Young, J. S., Smith, C. T., Dang, L. C., et al. (2019). Individual differences in dopamine are associated with reward discounting in clinical groups but not in healthy adults. *Journal of Neuroscience*, 39(2), 321.

Juarez, E.J., Castrellon, J.J., Green, M.A., **Crawford, J.L.**, Seaman, K.L., Smith, C.T., Dang, L.C., Zald, D.H., & Samanez-Larkin, G.R. (2019). Reproducibility of the correlative triad among aging, dopamine receptor availability, and cognition. *Psychology and Aging*, 34(7), 921–932.

Smith, C.T., **Crawford, J.L.**, Dang, L.C., Seaman, K.L., San Juan, M.D., Vijay, A., Katz, D.T., Matuskey, D., Cowan, R.L., Morris, E.D., Zald, D.H., & Samanez-Larkin, G.R. (2019). Partial volume correction increases estimated dopamine D2-like receptor binding potential and reduces adult age differences. *Journal of Cerebral Blood Flow & Metabolism*, 39(5), 822–833.

Manuscripts Under Review/In Revision

Aschenbrenner, A.J. **Crawford, J.L.**, Peelle, J.E., Fagan, A.M., Benzinger, T.L.S., Morris, J.C., Hassenstab, J., & Braver, T.S. Increased cognitive effort costs in healthy aging and preclinical Alzheimer's Disease.

Green, M.A., Seaman, K.L., **Crawford, J.L.**, Kuhnen, C.M., & Samanez-Larkin, G.R. Multivariate associations between dopamine receptor availability and risky investment decision making across adulthood.

Invited Talks

Crawford, J.L. (2022). Aging and the costs of cognitive effort. Aging Well Lab, UT Dallas.

Crawford, J.L. & Braver, T.S. (2021). Domain general cognitive motivation and economic decision-making: A registered report. A Bunch of Control Datablitzes (ABCD) (virtual).

Crawford, J.L. & Braver, T.S. (2020). Aging and the costs of cognitive effort. Scientific Research Network on Decision Neuroscience & Aging Conference, Honolulu, HI.

Local

Crawford, J.L. & Braver, T.S. (2022). Does the cost of cognitive effort differ among younger and older adults? A multimethod approach. Cognitive, Computational, and Systems Neuroscience Annual Retreat.

Crawford, J.L., English, T. & Braver, T.S. (2022). Examining cognitive effort costs across experimental and daily life indices in younger and older adults. Washington University Aging & Development Brown Bag.

Crawford, J.L., Eisenstein, S.A., Peelle, J.E., Braver, T.S. (2020). Aging and the costs of cognitive effort. Washington University Alzheimer's Disease Research Center (virtual).

Crawford, J.L. & McLaughlin, D.J. (2020). Using cognitive effort discounting paradigms to examine subjective listening effort and relationships to effortful experiences of daily life in older adults. Washington University Behavior, Brain, and Cognition Brown Bag.

Poster Presentations

Crawford, J.L., Brough, R.E., Eisenstein, S.A., English, T., Peelle, J.E., & Braver, T.S. (2023). Does the cost of cognitive effort differ among younger and older adults? A multimethod approach. Dallas Aging & Cognition Conference, Dallas, TX.

Castrellon, J.J., **Crawford, J.L.**, Hsu, M., & Samanez-Larkin, G.R. (2022). Individual differences in extrastriatal D2-like receptors shape strategic social learning. Society for Neuroeconomics Annual Meeting, Arlington, VA.

Crawford, J.L., English, T. & Braver, T.S. (2022). Effects of gain and loss incentive framing on cognitive effort-based decision-making in younger and older adults: A multimethod approach. Cognitive Aging Conference, Atlanta, GA.

Crawford, J.L., English, T. & Braver, T.S. (2021). Combining experimental and daily life sampling approaches in aging research: opportunities and challenges. Society for Ambulatory Assessment Conference (virtual).

Crawford, J.L., Yee, D.M., Lamichhane, B., Di Rosa, E., & Braver, T.S. (2020). Neural Mechanisms of Motivated Cognitive Control in Older Adults. Organization for Human Brain Mapping Conference (virtual).

Moore, I.L., Fields, E.C., **Crawford, J.L.**, Paige, L.E., Cassidy, B.S., & Gutchess, A. (2020). Attentional Prioritization of Negative Appearance-Behavior Cues in Impression Formation. Cognitive Neuroscience Society Conference, Boston, MA (virtual).

Crawford, J.L., Yee, D.M., & Braver, T.S. (2019). Age-related changes in motivational integration involving socio-emotional incentives. Dallas Aging & Cognition Conference, Dallas, TX.

Johnson, C.P., Castrellon, J.J., **Crawford, J.L.**, & Samanez-Larkin, G.R. (2019). I like it like that: reward discounting and appetitive responses to amphetamine in a drug naïve sample of healthy adults. Interdisciplinary Symposium on Decision Neuroscience, Durham NC.

Juarez, E.J., Castrellon, J.J., **Crawford, J.L.**, Green, M.A., McAllister, G.A., Seaman, K.L., Smith, C.T., Dang, L.C., Zald, D.H., & Samanez-Larkin, G.R. (2018). Reliability of the correlative triad among aging, dopamine, and cognition. Cognitive Neuroscience Society Conference, Boston, MA & Cognitive Aging Conference, Atlanta, GA.

Crawford, J.L., Seaman, K.L., Vijay, A., Matuskey, D., Morris, E.D., & Samanez-Larkin, G.R. (2017). Effects of age on extrastriatal dopamine D2 receptor availability are overestimated without partial volume correction. Dallas Aging and Cognition Conference, Dallas, TX & Cognitive Neuroscience Society Conference, San Francisco, CA.

McAllister, G.A., Castellon, J.J., Seaman, K.L., **Crawford, J.L.**, Blow, T., Smith, C.T., Dang, L.C., Hsu, M., Zald, D.H., & Samanez-Larkin, G.R. (2017). Individual differences in dopamine receptor availability are not associated with preferences for time, probability, or effort across adulthood. Society for Neuroeconomics Annual Meeting, Toronto, Canada.

Zhang, Z., Saez, I., **Crawford, J.L.**, Seaman, K.L., Samanez-Larkin, G.R., Hsu, M., & Kayser, A. (2017). Dopamine, prefrontal cortex, and strategic learning. Society for Neuroscience Annual Meeting, Washington D.C.

Vijay, A., **Crawford, J.L.**, Seaman, K.L., Morris, E.D., & Samanez-Larkin, G.R. (2016). Decreased extrastriatal dopamine D2 receptor availability over human adulthood using [11C]-FLB457. International Symposium on Functional NeuroReceptor Mapping of the Living Brain, Boston, MA.

Crawford, J.L., Paige, L.E., Cassidy, B.S., & Gutchess, A.H. (2015). Facing the facts: Assessing the role of face-behavior incongruities in social cognition through the modulation of the N400. Social and Affective Neuroscience Society Conference, Boston, MA.

Teaching Experience

Teaching Assistant, Psych 3604: Cognitive Neuroscience Fall 2020, Spring 2021

Introductory survey course on cognitive neuroscience for undergraduate students

Lectures prepared: Motivation & Decision-Making; Executive Function; Cognitive Neuroscience of Aging

Undergraduate Mentoring (* denotes undergraduate who received external research support)

Casey Mason (2018-2019)*

Jadyn Park (2018-2020)*

Jada Smith (2018-2021)*

Vivian Gao (2019-2022)

Janelli Rodriguez (2019-2021)*

Angela Gormley (2020-2022)

HN Hoffmann (2021-2022)

Departmental & Community Service

Psychology Graduate Student Association (PGSA) Wellness Committee 2018-2019

Psychological & Brain Sciences (PBS) fMRI Journal Club (co-organizer) 2018-2022

PBS Diversity, Equity, and Inclusion Committee (student rep) 2020-2021

PGSA Diversity Committee (student member & public relations coordinator) 2020-2022

Project SHORT (mentor) 2020-present

PBS Aging Search Committee 2021-2022

Reviewing

Affective Science; Cognitive, Affective, and Behavioral Neuroscience; Current Biology; Motivation & Emotion; Psychology and Aging; Scientific Reports

Professional Memberships

Cognitive Neuroscience Society

Gerontological Society of America

Organization for Human Brain Mapping

Society for Ambulatory Assessment

Additional Training

Completion of Cognitive, Computational, and Systems Neuroscience Pathway
Aging & Decision Neuroscience Harmonization Workshop, SRNDNA
Intensive Longitudinal Methods Workshop

2017-2019
2019
2022

Other Skills

Programming: R, Matlab, bash/tcsh

Software: Adobe Creative Suite, E-prime, Inquisit Lab, PMOD, Psychtoolbox