

## Jennifer L. Crawford

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### Current Position

Graduate Student, Cognitive Control & Psychopathology Lab 2017-present  
Advisor: Todd Braver

### Education

B.S., Neuroscience, Brandeis University (*Highest Honors*) 2015  
M.A., Psychological & Brain Sciences, Washington University 2019

### 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  
Brandeis Undergraduate Research Fund Conference Travel Grant 2015  
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  
Sallie P. Asche Travel Award, Dallas Aging & Cognition Conference 2022  
Kavli Summer Institute in Cognitive Neuroscience, Fellow 2022  
Dean's Award for Graduate Research Excellence 2022

### Research Support

Crawford (PI) 6/1/2019–3/31/2022  
Cognitive effort and aging. Pilot project examining the role of cognitive motivation in older adulthood 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*.

Yee, D.M., **Crawford, J.L.**, & Braver, T.S. (In Press). Juicy research: a fMRI protocol for administering liquid incentives to human participants. *STAR Protocols*.

- 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.**, 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.

### **Talks**

#### International

- 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**

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.,** Peelle, J.E., & Braver, T.S. (2022). Does the cost of cognitive effort differ among younger and older adults? A multimethod approach. Dallas Aging & Cognition Conference, Dallas, TX. [canceled because of COVID-19]

**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., Castrellon, 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-present

PBS Diversity, Equity, and Inclusion Committee (student rep)

2020-2021

PGSA Diversity Committee (student member & public relations coordinator)

2020-present

Project SHORT (mentor)

2020-present

PBS Aging Search Committee

2021-present

### Reviewing

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

### 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