# **AMITAI SHENHAV** CURRICULUM VITAE

Department of Cognitive, Linguistic, and Psychological Sciences

# **Brown University**

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# **Academic Appointments**

Associate Professor, Brown University Department of Cognitive, Linguistic, and Psychological Sciences Carney Institute for Brain Science
Assistant Professor, Brown University Department of Cognitive, Linguistic, and Psychological Sciences Carney Institute for Brain Science
C.V. Starr Postdoctoral Fellow, Princeton University
Ph.D., Harvard University, Psychology
Ph.D., Harvard University, Psychology  Dissertation: "Neural Circuits at the Intersection of Feeling and Deciding"
Dissertation: "Neural Circuits at the Intersection of Feeling and Deciding"

# **Selected Honors and Awards**

2022-Present	Fellow, Scialog, Research Corporation for Science Advancement
2020-Present	Fellow, Association for Psychological Science (APS)
2021	Society for Neuroeconomics Early Career Award
2021	Cognitive Neuroscience Society Young Investigator Award
2020	APS Janet Taylor Spence Award for Transformative Early Career Contributions
2019-21	Alfred P. Sloan Foundation Research Fellowship in Neuroscience
2017	Association for Psychological Science Rising Star Award
2012-16	C.V. Starr Foundation Postdoctoral Fellowship
2011-12	Sackler Scholar Programme in Psychobiology Fellowship
2011	Harvard Mind, Brain, Behavior Graduate Student Award
2010	Harvard Derek Bok Center Teaching Award
2009	Cognitive Neuroscience Society Graduate Students Present Award
2008-11	National Science Foundation Graduate Research Fellowship

### **Current Grants**

2024-27	NSF Collaborative Research in Computational Neuroscience (CRCNS) Award 2309022	
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Role: Principal Investigator

Neural and computational mechanisms of flexible goal-directed decision making

Total costs: \$812,227

2021-26 NSF Faculty Early Career Development (CAREER) Award 2046111

Role: Principal Investigator

The vital role of motivation in cognition

Total costs: \$794,090

2021-25 NIH/NIMH R01MH124849

Role: Principal Investigator

Neural and computational mechanisms of motivation and cognitive control

Total costs: \$1,991,667

2022-27 NIH/NIMH P50MH106435 Conte Center

Role: Co-Principal Investigator, Neurocomputational Modeling Core (Center PI: Suzanne Haber)

Neurocircuitry of OCD: Effects of Modulation

Total sub-award costs: \$1,130,312

2020-25 NIH/NIDDK R01DK120597

Role: Co-Investigator

Executive Functioning, Weight Trajectories, and Loss of Control Eating in Children with

Overweight/Obesity: A Prospective Study

Total sub-award costs: \$603,511

# **Recently Completed Grants**

2020-23 NIH/NIMH R21MH122863

Role: Co-Principal Investigator

Computationally modeling the failure of effort to become a secondary reinforcer in schizophrenia

Total costs: \$190,125

2019-23 Alfred P. Sloan Foundation Research Fellowship in Neuroscience

Role: Principal Investigator Direct costs: \$70,000

2020-22 Brown Office of the Vice President for Research Seed Award

Role: Principal Investigator

Dissociating neurocomputational mechanisms underlying positive and negative motivations for

cognitive effort persistence Direct costs: \$49,000

Direct costs. \$49,000

2019-22 Scientific Research Network on Decision Neuroscience and Aging Pilot Grant

Role: Principal Investigator

Mechanisms of motivation and cognitive control in healthy older adults

Direct costs: \$30,000

2019-21 Carney Institute for Brain Science Innovation Award

Role: Co-Principal Investigator

Testing a novel neurocomputational account of the socioeconomically driven achievement gap

Direct costs: \$132,000

2017-21 NIH/NIGMS P20GM103645 Center of Biomedical Research Excellence

Role: Project Leader

Mechanisms of cognitive interference from value-based choice conflict

Direct costs: \$755,000

# Peer-Reviewed Articles († denotes trainee, \* denotes shared authorship)

- 1. †Ritz, H. & **Shenhav**, **A.** (in press). Humans reconfigure target and distractor processing to address distinct task demands. *Psychological Review*.
- 2. †Grahek, I, †Frömer, R, †Prater Fahey, M., **Shenhav, A.** (2023). Learning when effort matters: Neural dynamics underlying updating and adaptation to changes in performance efficacy. *Cerebral Cortex 33(5):* 2395–2411.
- 3. <sup>†</sup>Frömer, R. & **Shenhav**, **A.** (2022). Filling the gaps: Cognitive control as a critical lens for understanding mechanisms of value-based decision-making. *Neuroscience and Biobehavioral Reviews 134: 104483*.
- 4. Fontanesi, L., \*Shenhav, A., \*Gluth, S. (2022). Disentangling choice value and choice conflict in sequential decisions under risk. *PLOS Computational Biology 18(10): e1010478*.
- 5. †Rmus, M., †Ritz, H., Hunter, L.E., \*Bornstein, A.M., \*Shenhav, A. (2022). Humans can navigate complex graph structures acquired during latent learning. *Cognition 225: 105103*.
- 6. †Ritz, H., †Leng, X., **Shenhav, A.** (2022). Cognitive control as a multivariate optimization problem. *Journal of Cognitive Neuroscience 34(4):* 569-591.
- 7. Kane, G.A., James, M.H., **Shenhav, A.**, Daw, N.D., Cohen, J.D., Aston-Jones, G. (2022). Rat anterior cingulate cortex continuously signals decision variables in a patch foraging task. *Journal of Neuroscience* 49(29): 5730-5744.
- 8. <sup>†</sup>Yee, D., <sup>†</sup>Leng, X., **Shenhav, A.**, Braver, T. (2022). Aversive Motivation and Cognitive Control. *Neuroscience and Biobehavioral Reviews 133: 104493*.
- 9. †Leng, X., †Yee, D., †Ritz, H., **Shenhav, A.**. (2021). Dissociable influences of reward and punishment on adaptive cognitive control. *PLOS Computational Biology* 17(12), e1009737.
- 10. Collins, A.G.E. & **Shenhav**, **A.** (2021). Advances in modeling learning and decision-making in neuroscience. *Neuropsychopharmacology* 47: 104-118.
- 11. **Shenhav, A.**, †Prater Fahey, M., †Grahek, I. (2021). Decomposing the motivation to exert mental effort. *Current Directions in Psychological Science 30(4):* 307-314.
- 12. \*†Frömer, R, \*Lin, H., †Dean Wolf, C.K., Inzlicht, M., **Shenhav, A.** (2021). Expectations of reward and efficacy guide cognitive control allocation. *Nature Communications* 12: 1030.
- 13. †Bustamante, L., Lieder, F., Musslick, S., **Shenhav, A.**, Cohen, J.D. (2021). Learning to Overexert Cognitive Control in a Stroop Task. *Cognitive, Affective, and Behavioral Neuroscience*.
- 14. †Grahek I., Musslick S., **Shenhav A.** (2020). A computational perspective on the roles of affect in cognitive control. *International Journal of Psychophysiology 151*: 25-34.
- 15. Sadeghiyeh H., Wang S., Alberhasky M.R., Kyllo H.M., **Shenhav A.**, Wilson, R.C. (2020). Temporal discounting correlates with directed exploration but not random exploration. *Scientific Reports* 10(1): 1-10.
- 16. <sup>†</sup>Frömer, R., <sup>†</sup>Dean Wolf, C.K., **Shenhav, A.** (2019). Goal congruency dominates reward value in accounting for behavioral and neural correlates of value-based decision-making. *Nature Communications* 10(1): 4926.
- 17. Wilson R.C., **Shenhav A.**, Straccia M.A., Cohen J.D. (2019). The Eighty Five Percent Rule for optimal learning. *Nature Communications* 10(1): 4646.
- 18. Kane G. A., Bornstein A. M., **Shenhav A.**, Wilson R. C., Daw N. D., Cohen J. D. (2019). Rats exhibit similar biases in foraging and intertemporal choice tasks. *eLife*, 8:e48429.
- 19. FeldmanHall O., **Shenhav A.** (2019). Resolving uncertainty in a social world. *Nature Human Behavior 3:* 426-435.
- 20. †Grahek I., **Shenhav A.**, Musslick, S., Krebs RM, Koster E.H.W. (2019). Motivation and cognitive control in depression. *Neuroscience & Biobehavioral Reviews 102: 371-381*.

- 21. \*Miller K.J., \*Shenhav A., Ludvig E.A. (2019). Habits without values. *Psychological Review 126(2):* 292-311. \*Shared first authorship
- 22. **Shenhav A.**, Karmarkar U.R. (2019). Dissociable components of the reward circuit are involved in appraisal versus choice. *Scientific Reports 9(1958):* 1-12.
- 23. **Shenhav A.**, †Dean Wolf C.K., Karmarkar U.R. (2018). The evil of banality: When choosing between the mundane feels like choosing between the worst. *Journal of Experimental Psychology: General 147(12):* 1892-1904.
- 24. Zacharopoulos G., **Shenhav A.**, Constantino S., Maio G.R., Linden D.E.J. (2018). The effect of self-focus on personal and social foraging behavior. *Social, Cognitive, and Affective Neuroscience: 13(9):* 967-965.
- 25. †Ritz H., Nassar M., Frank M.J., **Shenhav A.** (2018). A control theoretic model of adaptive behavior in dynamic environments. *Journal of Cognitive Neuroscience* 30(10): 1405-1421.
- 26. **Shenhav A.**, Straccia M.A., Musslick, S., Cohen J.D., Botvinick M.M. (2018). Dissociable neural mechanisms track evidence accumulation for selection of attention versus action. *Nature Communications 9* (1): 2485.
- 27. Lieder F., **Shenhav A.**, Musslick S., Griffiths T.L. (2018). Rational metareasoning and the plasticity of cognitive control. *PLOS Computational Biology* 14(4): e1006043.
- 28. Inzlicht M., **Shenhav A.**, Olivola C.Y. (2018). The effort paradox: Effort is both costly and valued. *Trends in Cognitive Sciences* 22(4): 337-349.
- 29. **Shenhav A.**, Musslick S., Lieder F., Kool W., Griffiths T.L., Cohen J.D., Botvinick M.M. (2017). Toward a rational and mechanistic account of mental effort. *Annual Reviews of Neuroscience 40: 99-124*.
- 30. **Shenhav A.**, Rand D.G., Greene J.D. (2017). The relationship between intertemporal choice and following the path of least resistance across choices, preferences, and beliefs. *Judgment & Decision Making 12*(1): 1-18.
- 31. Kane, G., Vazey, E., Wilson, R., **Shenhav, A.**, Daw, N., Aston-Jones, G., and Cohen, J.D. (2017). Increased locus coeruleus tonic activity causes disengagement from a patch foraging task. *Cognitive, Affective, and Behavioral Neuroscience* 17(6): 1073-1083.
- 32. Srivastava V., Feng S., Cohen, J.D., Leonard N.E., **Shenhav A.** (2017). A martingale analysis of first passage times of time-dependent Wiener diffusion models. *Journal of Mathematical Psychology* 77: 94-110.
- 33. **Shenhav A.**, Botvinick M.M., Cohen J.D. (2016). Dorsal anterior cingulate cortex and the value of control. *Nature Neuroscience 19*(10): 1286-1291.
- 34. **Shenhav A.**, Straccia M.A., Botvinick M.M., Cohen J.D. (2016). Dorsal anterior cingulate and ventromedial prefrontal cortex have inverse roles in both foraging and economic choice. *Cognitive, Affective, and Behavioral Neuroscience 16(6):* 1127-1139.
- 35. Trapp S., **Shenhav A.**, Bitzer S., Bar M. (2015). Human preferences are biased towards associative information. *Cognition and Emotion* 29(6): 1054-1068.
- 36. **Shenhav A.**, Straccia M.A., Cohen J.D., Botvinick M.M. (2014). Anterior cingulate engagement in a foraging context reflects choice difficulty, not foraging value. *Nature Neuroscience* 17(9): 1249-1254.
- 37. **Shenhav A.** & Buckner R.L. (2014). Neural correlates of dueling affective reactions to win-win choices. *Proceedings of the National Academy of Sciences 111*(30): 10978-10983.
- 38. **Shenhav A.** & Greene J.D. (2014). Integrative moral judgment: Dissociating the roles of the amygdala and ventromedial prefrontal cortex. *Journal of Neuroscience* 34(13): 4741-4749.
- 39. **Shenhav A.** & Mendes W.B. (2014). Aiming for the stomach and hitting the heart: dissociable triggers and sources for disgust reactions. *Emotion* 14(2): 301-309.
- 40. **Shenhav A.**, Botvinick M.M., Cohen J.D. (2013). The expected value of control: an integrative theory of anterior cingulate cortex function. *Neuron* 79(2): 217-240.

- 41. **Shenhav A.**, Barrett L.F., Bar M. (2013). Affective value and associative processing share a cortical substrate. *Cognitive, Affective, and Behavioral Neuroscience* 13: 46-59.
- 42. Brunye T. T., Gagnon S. A., Paczynski M., **Shenhav A.**, Mahoney C. R., & Taylor H. A. (2013). Happiness by association: generating broad associations promotes positive affect. *Cognition* 127 (1): 93-98.
- 43. \*Shenhav A., \*Rand D.G., Greene J.D. (2012). Divine intuition: cognitive style influences belief in God. *Journal of Experimental Psychology: General 141*(3): 423-428.
- 44. **Shenhav A.** & Greene J.D. (2010). Moral judgments recruit domain-general valuation mechanisms to integrate representations of probability and magnitude. *Neuron* 67(4): 667-677.
- 45. Silver M.A., **Shenhav A.**, D'Esposito M. (2008). Cholinergic enhancement reduces spatial spread of visual responses in human early visual cortex. *Neuron* 60(5): 904-914.

# Manuscripts Under Review or in Revision († denotes trainee, \* denotes shared authorship)

- 1. \*\*Grahek, I., \*\*Leng, X., Musslick, S., & **Shenhav, A.** Control adjustment costs limit goal flexibility: Empirical evidence and a theoretical account. Preprint: <a href="https://doi.org/10.1101/2023.08.22.554296">https://doi.org/10.1101/2023.08.22.554296</a>
- 2. †Leng, X., †Frömer, R., Summe, T., **Shenhav, A.** Mutual inclusivity improves decision-making by smoothing out choice's competitive edge. Preprint: <a href="https://doi.org/10.1101/2023.05.12.540529">https://doi.org/10.1101/2023.05.12.540529</a>
- 3. \*†Ritz, H., \*†Frömer, R., **Shenhav, A.** Phantom controllers: Misspecified models create the false appearance of adaptive control during value-based choice. Preprint: <a href="https://doi.org/10.1101/2023.01.18.524640">https://doi.org/10.1101/2023.01.18.524640</a>
- 4. †Ritz, H. & **Shenhav**, **A.** Orthogonal neural encoding of targets and distractors supports multivariate cognitive control. Preprint: <a href="https://doi.org/10.1101/2022.12.01.518771">https://doi.org/10.1101/2022.12.01.518771</a>
- 5. \*\*Frömer, R., \*Callaway, F., Griffiths, T., **Shenhav, A.** Considering what we know and what we don't know: Expectations and confidence guide value integration in value-based decision-making. Preprint: <a href="http://doi.org/10.31234/osf.io/2sqyt">http://doi.org/10.31234/osf.io/2sqyt</a>
- 6. †Frömer, R., Nassar, M.R., Ehinger, B.V., **Shenhav, A.** Common neural choice signals emerge artifactually amidst multiple distinct value signals. Preprint: <a href="https://doi.org/10.1101/2022.08.02.502393">https://doi.org/10.1101/2022.08.02.502393</a>
- 7. Bustamante, L.A., Oshinowo, T., Lee, J.R., Tong, E., Burton, A.R., **Shenhav, A.**, Cohen, J.D., Daw, N.D. Effort Foraging Task reveals positive correlation between individual differences in the cost of cognitive and physical effort in humans and relationship to self-reported motivation and affect. Preprint: <a href="https://doi.org/10.1101/2022.11.21.517394">https://doi.org/10.1101/2022.11.21.517394</a>
- 8. †Frömer, R. & **Shenhav**, **A.** Spatiotemporally distinct neural mechanisms underlie our reactions to and comparison between value-based options. Preprint: https://doi.org/10.1101/609198
- 9. †Zhang, Y., †Leng, X., **Shenhav, A.** Make or break: The influence of expected challenges and rewards on the motivation and experience associated with cognitive effort exertion.
- 10. **Shenhav, A.**, Musslick, S., Botvinick, M. M., Cohen, J. D. Misdirected vigor: Differentiating the control of value from the value of control. Preprint: https://doi.org/10.31234/osf.io/5bhwe
- 11. Galla B.M., Baelen R.N., Fiore H.M., Hutt S., **Shenhav A.** Social media desire and impulsiveness: Intensified by self-immersion, reduced by mindfulness. Preprint: https://doi.org/10.31234/osf.io/ch43n.

#### **Books**

1. Morris R.W., Bornstein A.M., **Shenhav A.**, Editors (2018). Goal-Directed Decision Making: Computations and Neural Circuits. Amsterdam: Elsevier.

### **Book Chapters**

- 1. Wolff, W., Hirsch, A., Bieleke, M., **Shenhav**, **A.** (2021). Neuroscientific approaches to self-regulatory control in sports. In C. Englert & I. Taylor (eds.), *Self-regulation and motivation in sport and exercise psychology*. London: Routledge.
- 2. Miller K.J., Ludvig E.A., Pezzulo G, **Shenhav A.** (2018). Re-aligning models of habitual and goal-directed decision-making. In Morris R.W., Bornstein A.M., Shenhav A. (Eds.), *Goal-Directed Decision Making: Computations and Neural Circuits*. Amsterdam: Elsevier.
- 3. \*Kool W., \*Shenhav A., Botvinick M.M. (2017). Cognitive control as cost-benefit decision making. In T. Egner (Ed.), *Wiley Handbook of Cognitive Control* (pp. 167-189). Chichester, West Sussex, UK: John Wiley & Sons.

#### **Commentaries**

- 1. Braem, S., Held, L., **Shenhav, A.**, †Frömer, R. (in press). Learning how to reason and deciding when to decide. Commentary on Advancing Theorizing about Fast-and-Slow Thinking by Wim De Neys. *Behavioral and Brain Sciences*.
- 2. †Ritz, H., †Frömer, R., **Shenhav, A.** (2020). Bridging Motor and Cognitive Control: It's About Time! *Trends in Cognitive Sciences* 24(1): 6-8.
- 3. **Shenhav, A.** (2017). The perils of losing control: Why self-control is not just another value-based decision. *Psychological Inquiry* 28(2-3): 148-152.
- 4. **Shenhav**, **A**. & Botvinick, M.M. (2015). Uncovering a missing link in anterior cingulate research. *Neuron* 85(3): 455-457.
- 5. Bornstein, A.M., **Shenhav A.**, Miller K.J. (2015) Walking bundles of habits (and Response-Outcome associations). *European Journal of Neuroscience* 41:1356-1357.
- 6. **Shenhav, A.** & Botvinick, M.M. (2013). Motivated action: New light on prefrontal-neuromodulatory circuits. *Current Biology 23*(4): R161-R163.
- 7. Haque, O.S., **Shenhav**, **A.**, Rand, D.G. (2011). Differences in cognitive style, emotional processing and ideology as crucial variables in understanding meaning making. *Religion*, *Brain & Behavior 1*(3): 223-225.

# **Peer-Reviewed Conference Papers**

- 1. †\*Grahek, I., †\*Leng, X., Musslick, S., **Shenhav, A.** (2023). The Cost of Adjusting Cognitive Control: A Dynamical Systems Approach. *Conference on Computational Cognitive Neuroscience*. Oxford, UK. [link]
- 2. †Ritz, H., **Shenhav**, **A.** (2022). Orthogonal neural encoding of targets and distractors supports cognitive control. *Conference on Computational Cognitive Neuroscience*. San Francisco, CA. [link]
- 3. †Kim, J., †Frömer, R., †Leng, X., **Shenhav, A.** (2022). Approximate Bayesian Inference captures differential effects of value confidence on obligatory and voluntary choices. *Conference on Computational Cognitive Neuroscience*. San Francisco, CA. [link]
- 4. †Leng, X., †Frömer, R., †Summe, T., **Shenhav, A.** (2022). Leaving alternatives behind: A theoretical and experimental investigation of the role of mutual inhibition in shaping choice. *Conference on Computational Cognitive Neuroscience*. San Francisco, CA. [link]
- 5. †Frömer, R., Gluth, S., **Shenhav, A.** (2022). Hidden knobs: Representations for flexible goal-directed decision-making. *Reinforcement Learning and Decision Making*. Providence, RI. [link]
- 6. †Prater Fahey, M., †Yee, D., †Leng, X., †Tarlow, M. **Shenhav, A.** (2022). Disentangling influences of aversive motivation on control allocation across distinct motivational contexts. *Reinforcement Learning and Decision Making*. Providence, RI. [link]
- 7. †Kim, J., †Frömer, R., †Leng, X., **Shenhav, A.** (2022). Confidently conflicted: The impact of value confidence on choice varies with choice context. *Reinforcement Learning and Decision Making*. Providence, RI. [link]

- 8. †Leng, X., †Frömer, R., †Summe, T., **Shenhav**, **A.** (2022). A theoretical and experimental investigation of the role of mutual inhibition in shaping choice. *Reinforcement Learning and Decision Making*. Providence, RI. [link]
- 9. †Grahek, I., †Leng, X., †Prater Fahey, M., †Yee, D., R., **Shenhav, A.** (2022). Empirical and Computational Evidence for Reconfiguration Costs During Within-Task Adjustments in Cognitive Control. *Proceedings of the 44<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Toronto, CA. [link]
- 10. †Leng, X., †Ritz, H., †Yee, D., **Shenhav, A.** (2020). Dissociable influences of reward and punishment on adaptive cognitive control. *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*. Toronto, CA. [link]
- 11. †Ritz, H., DeGutis, J., Frank M.J., Esterman, M., **Shenhav**, **A.** (2020). An evidence accumulation model of motivational and developmental influences over sustained attention. *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*. Toronto, CA. [link]
- 12. †Frömer, R., **Shenhav**, **A.** (2019). Overriding first impressions: evidence for a reference-dependent and attentionally-weighted multi-stage process of value-based decision-making. *Reinforcement Learning and Decision Making*. Montreal, CA.
- 13. †Ritz H., **Shenhav A.** (2019) Parametric control of distractor-oriented attention. *Proceedings of the 41st Annual Conference of the Cognitive Science Society.* Montreal, CA: Cognitive Science Society. [link]
- 14. †Ritz H, Nassar M.R., Frank M.J., **Shenhav A.** (2019) Decisions about reward and effort for learning and control of dynamical systems. *Reinforcement Learning & Decision Making*. Montreal, CA.
- 15. Musslick S., Cohen J.D., **Shenhav A.** (2019). Decomposing individual differences in cognitive control: A model-based approach. *Proceedings of the 41st Annual Conference of the Cognitive Science Society*. Montreal, CA: Cognitive Science Society. [link]
- 16. \*Spitzer M., \*Musslick S., **Shenhav A.**, Cohen, J.D., (2019). Asymmetric switch costs as a function of task strength. *Proceedings of the 41st Annual Conference of the Cognitive Science Society*. Montreal, CA: Cognitive Science Society. [link]
- 17. Musslick S., Cohen, J.D., **Shenhav A**. (2018). Estimating the costs of cognitive control from task performance: theoretical validation and potential pitfalls. *Proceedings of the 40 Annual Conference of the Cognitive Science Society*. Madison, WI: Cognitive Science Society. [link]
- 18. Musslick S., Seong, J.J., Shvartsman, M., **Shenhav A**., Cohen, J.D. (2018). Constraints associated with cognitive control and the stability-flexibility dilemma. *Proceedings of the 40 Annual Conference of the Cognitive Science Society*. Madison, WI: Cognitive Science Society. [link]
- 19. Kane G.A., Bornstein A.M., **Shenhav A.**, Wilson R.C., Daw N.D., Cohen J.D. (2017). Mechanisms of overharvesting in patch foraging in rodents. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. Davelaar (Ed.), *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. (pp. 637-642). Austin, TX: Cognitive Science Society. [link]
- 20. Musslick, S., **Shenhav**, **A.**, Botvinick, M. M., Cohen, J. D. (2015) A computational model of control allocation based on the Expected Value of Control. *Reinforcement Learning & Decision Making*. Edmonton, Alberta, CA. [link]

#### **Invited Talks**

October, 2023 Cognition and Perception Colloquium, New York University. New York	λ, ΝΥ.
June, 2023 Keynote, EARLI Monitoring and Regulation of Effort Network Virtual I	Meeting.
April, 2023 Psychology Colloquium, UC Berkeley, Berkeley, CA.	
March, 2023 Brain, Behavior and Cognition Seminar, Boston University. Boston, MA	۱.
March, 2023 Seminar, Max Planck UCL Centre for Computational Psychiatry. Londo	n, UK.
December, 2022 Neuroeconomics Seminar, University of Zurich. Zurich, Switzerland.	

Psychology Colloquium, Yale University. New Haven, CT. November, 2022 Invited talk, 3<sup>rd</sup> Annual Mental Effort Workshop. Providence, RI. November, 2022 Keynote, The Nature & Value of Effort. University of Neuchâtel. Neuchâtel, Switzerland. August, 2022 Cognitive Science Department, Rensselaer Polytechnic Institute. Troy, NY. April, 2022 March, 2022 Invited Flash Talks, Society for Affective Science Virtual Meeting. November, 2021 Decision Neuroscience Symposium, Univ of Melbourne, Melbourne, Australia. May, 2021 Psychological Science Lecture Series, Univ of Hamburg, Hamburg, Germany. May, 2021 Cognitive Science Colloquium Series, UC San Diego. San Diego, CA. March, 2021 Center for Information and Neural Networks, Osaka University. Osaka, Japan. November, 2020 Reinforcement Learning & Decision Making Series, Max Planck-Tübingen, Germany. October, 2020 Opportunity Insights Lunch Lecture, Harvard University. Cambridge, MA. June, 2020 Interdisciplinary Symposium on Decision Neuroscience. Philadelphia, PA. February, 2020 Depression, Anxiety & Stress Research Series, McLean Hospital. Belmont, MA. September, 2019 Center for Cognitive Neuroscience Seminar, Ghent University. Ghent, Belgium. Motivation and Cognitive Control Symposium. Berlin, Germany. September, 2019 April, 2019 Decision Neuroscience Symposium, University of Oregon. Eugene, OR. March, 2019 Social Psychology Brown-Bag Series, Harvard University. Cambridge, MA. March, 2019 Cognitive Neuroscience Colloquium Series, Duke University. Durham, NC. August, 2018 SFB Symposium on Volition and Self-Control. Dresden, Germany. March, 2018 Psychology Current Works Series, Yale University. New Haven, CT. October, 2017 Cognition, Brain, & Behavior Series, Harvard University. Cambridge, MA. October, 2017 Philosophical, Cognitive, & Neural Bases of Responsible Action. Princeton, NJ. June, 2017 Spring School on Cognitive-Affective Neuroscience. Dresden, Germany. May, 2017 Psi Chi Departmental Conference, UMass Dartmouth. Dartmouth, MA. Industrial/Organization Psychology Series, U of Connecticut. Storrs, CT. March, 2017 December, 2016 Cognitive and Brain Sciences Colloquium, UC Berkeley, Berkeley, CA. August, 2016 Computational Properties of the Prefrontal Cortex, Lyon, France. May, 2016 International Symposium on the Biology of Decision Making, Paris, France. May, 2016 Department of Psychology, University of Toronto, Toronto, Ontario, Canada. April, 2016 Grand Rounds, Department of Psychiatry, Brown University. Providence, RI. March, 2016 Sackler Institute Science Series, Weill Medical College, Cornell. New York, NY. February, 2016 Cognitive Science Colloquium Series, University of Arizona. Tucson, AZ. December, 2015 Neuroeconomics Seminar, University of Zurich. Zurich, Switzerland. April, 2015 Moral Psychology Research Group. Hanover, NH. March, 2015 Social Psychology Seminar, UNC Chapel Hill. Chapel Hill, NC. Affective Brain Lab Series, University College of London. London, UK. March, 2015 February, 2015 Department of Psychology, Columbia University. New York, NY February, 2015 Cognitive, Linguistic, & Psychological Sciences Dept. Brown. Providence, RI. Department of Psychological & Brain Sciences, Boston University. Boston, MA. February, 2015 January, 2015 Cognitive Psychology Seminar, Stanford University. Stanford, CA. January, 2015 Department of Psychology, Cornell University. Ithaca, NY. January, 2015 Center for Mind and Brain, University of California, Davis. Davis, CA. December, 2014 Department of Psychology, University of Pennsylvania, Philadelphia, PA.

November, 2014 Department of Psychological & Brain Sciences, Dartmouth, Hanover, NH.

February, 2014 Cognitive Psychology Seminar, Yale University. New Haven, CT.

# **Chaired Conference Symposia and Workshops**

September, 2021	2 <sup>nd</sup> Workshop on Mental Effort. Co-advisor: Jon Cohen. Organizers: Laura Bustamante, Ivan Grahek, Sebastian Musslick, Maria Wirzberger.
July, 2020	Mental Effort: One Construct, Many Faces? Co-organizers: Laura Bustamante, Jon Cohen, Ivan Grahek, Sebastian Musslick, Maria Wirzberger. Cognitive Science Society. Workshop.
March, 2019	Affective and motivational influences on decision-making. Co-chair: Candace Raio. Cosyne. Workshop.
November, 2016	Towards a Better Understanding of the Motivation-Control Interface. Control Processes Conference. Symposium.
October, 2015	Understanding Goal-Directed Decision-Making in Humans: Computations and Circuits. Co-chair: Richard Morris. Society for Neuroscience. Minisymposium.
March, 2015	Random Walk Models Across Decision Making Domains. Co-chairs: Michael Shvartsman and Robert Wilson. Cosyne. Workshop.

### Recent Conference Presentations († denotes trainee)

- 1. †Leng, X., †Frömer, R., **Shenhav**, **A.** (2022) Neural dynamics underlying divergent influences of reward and punishment on control allocation. Society for Neuroeconomics [Poster].
- 2. †Frömer, R., †Kim, J., †Prater Fahey, M., **Shenhav, A.** (2022) Neural circuits underlying the integration of reward and efficacy to determine the expected value of control. Society for Neuroeconomics [Poster].
- 3. †Prater Fahey, M., Bustamante, L.A., †Grahek, I., Solis, J., Oshinowo, T., Tong, E., Lee, J., Burton, A.R., Konova, A., Daw, N.D., Cohen, J.D., **Shenhav, A.** (2022) Disentangling the motivation to exert cognitive control in depression. Society for Neuroeconomics [Poster].
- 4. †Frömer, R. & **Shenhav**, **A.** (2022) Distinct neural dynamics underpin competing subjective experiences of value-based choice. Society for Neuroeconomics [Poster].
- 5. McKim, T.H., †Frömer, R., †Prater Fahey, M., **Shenhav, A.**, Eppinger, B. Reiter, A.(2022). Examining the influence of reward and efficacy in development of the expected value of control. FLUX Paris, September 7-9, 2022 [Poster].
- 6. †Grahek, I., †Leng, X., †Prater Fahey, M., †Yee, D., R., **Shenhav, A.** (2022). Empirical and Computational Evidence for Reconfiguration Costs During Within-Task Adjustments in Cognitive Control. *Cognitive Neuroscience Society*. [Poster].
- 7. †Mundy, K., †Yee, D.M., †Leng, X., †Prater Fahey, M., **Shenhav**, **A.** (2021) Age-related differences in the influence of positive and negative motivational incentives on mental effort. Society for Affective Science [Poster].
- 8. †Ritz, H., †Frömer, R., **Shenhav, A.** (2021) Using process models to disentangle stimulus-driven and controlled processes during value-based decision making. Society for Neuroeconomics / Society for Neuroscience [Poster].
- 9. †Frömer, R., Nassar, M., Ehinger, B., **Shenhav, A.** (2021) Two distinct patterns of EEG activity emerge during value-based choice, neither related to evidence accumulation. Society for Neuroeconomics / Society for Neuroscience [Poster].

- 10. †Zhang, Y., †Leng, X., **Shenhav, A.** (2021) Does It Make You or Break You? the Influence of Expected Challenges and Rewards on the Motivation and Experience Associated with Cognitive Effort Exertion. Association for Psychological Sciences [Poster].
- 11. †Yee, D.M., †Leng, X., †Prater Fahey, M., †Tarlow, M., **Shenhav, A.** (2021) Psychiatric Symptom Dimensions are Associated with Positive and Negative Influences on Mental Effort. Society for Affective Science [Poster].
- 12. <sup>†</sup>Yee, D., <sup>†</sup>Tarlow, M., <sup>†</sup>Leng, X., <sup>†</sup>Prater Fahey, M., **Shenhav, A.** (2021) Investigating Dissociable Neural Mechanisms of Reward and Penalty Motivation on Mental Effort Allocation. Symposium on Biology of Decision-Making [Poster].
- 13. †Prater Fahey M., †Grahek I., †Dean Wolf C.K., Placido D., Orwicz A., Amso D., & **Shenhav A.** (2020). When is my effort worthwhile? Learned efficacy influences how adolescents allocate cognitive control. Flux Congress [Poster]
- 14. †Ritz, H., Hayden, B., **Shenhav, A.**, Yoo, S.B. (2020). Optimal control of approach-avoidance dynamics. Neuromatch 3.0 [Talk].
- 15. †Ritz, H., Nassar, M.R., Frank, M.J., **Shenhav, A.** (2020). Optimal decision-making in metric space. Society for Neuroeconomics [Poster Spotlight Talk].
- 16. †Leng, X., †Frömer, R., **Shenhav, A.** (2020). All you can choose: The influence of choice exclusivity on the process and experience of decision-making. Society for Neuroeconomics [Poster] / Interdisciplinary Symposium on Decision Neuroscience [Blitz].
- 17. <sup>†</sup>Frömer, R., Callaway, F., **Shenhav, A.** (October, 2020). Considering what we know and what we don't know: Expectations and metacognition guide value integration during economic choice. Society for Neuroeconomics [Talk].
- 18. †Tarlow, M., Chase, H., Graur, S., †Frömer, R., Haber, S.M., Monosov, I., \*Phillips, M., \*Shenhav, A. (2020). Characterizing approach-avoid decision-making under uncertainty in Obsessive Compulsive Disorder. Society for Neuroeconomics [Poster].
- 19. <sup>†</sup>Zhang, Y., <sup>†</sup>Leng, X., **Shenhav, A.** (2020) The influence of positive and negative incentives on physical effort persistence. Cognitive Neuroscience Society. [Poster]
- 20. †Frömer, R., **Shenhav A.** (2019). Overriding First Impressions: Evidence for a Reference-Dependent and Attentionally-Weighted Multi-Stage Process of Value-Based Decision-Making. Cognitive Computational Neuroscience [Poster]
- 21. †Bustamante, L.A., Burton, A., **Shenhav, A.**, Daw, N.D., and Cohen, J.D. (2019). Evidence for a cost of cognitive control effect on foraging behavior. 7th International Symposium on Motivational and Cognitive Control [Poster]/ 4th Multidisciplinary Conference on Reinforcement Learning and Decision Making [Poster].
- 22. <sup>†</sup>Frömer, R., Lin, H., <sup>†</sup>Dean Wolf, C.K., Inzlicht, M., **Shenhav A.** (2019). Neural dynamics underlying the integration of reward and efficacy during evaluation and motivation of cognitive control. 7th International Symposium on Motivational and Cognitive Control [Poster]. Society for Neuroscience [Talk].
- 23. †Ritz, H., **Shenhav A.** (2019). Parametric Control of Attention. 7th International Symposium on Motivational and Cognitive Control. [Poster]
- 24. †Grahek, I., †Frömer, R., **Shenhav A.** (2019). Learning whether control matters: neural dynamics underlying the updating of expectations and control allocation in response to changes in performance efficacy. 7th International Symposium on Motivational and Cognitive Control. [Poster]
- 25. †Leng, J., †Yee, D., **Shenhav A.** (2019). The influence of positive and negative incentives on cognitive effort persistence. 7th International Symposium on Motivational and Cognitive Control. [Poster]
- 26. †Grahek, I., Musslick, S., **Shenhav A.** (2019). The Role Affect in Cognitive Control: A Computational Approach and its Relevance for Depression. Annual Conference of the International Society for Research on Emotion. [Talk]
- 27. †Ritz, H., Nassar, M.R., Frank, M.J., **Shenhav, A.** (2019) Decisions about reward and effort for the learning and control of dynamical systems. Reinforcement Learning and Decision Making. Montreal, CA. [Poster]

- 28. †Ritz, H., †Dean Wolf, C., †Frömer, R., **Shenhav, A.** (2019) Quantifying the demands of value-based decision-making with short-term memory interference. Cognitive Neuroscience Society . San Francisco, USA. [Poster]
- 29. †Ritz, H., DeGutis, J., Frank M.J., Esterman, M., **Shenhav, A.** (2018) Modeling motivational influences on sustained attention. Society for Neuroeconomics. [Poster]
- 30. †Bustamante L., Burton A., Baker A., **Shenhav A.**, Daw N., Cohen J.D. (2018). The cost of cognitive control and the balance of random versus directed exploration. Society for Neuroscience. [Poster]
- 31. †Rmus M., †Ritz H., Hunter L.E., Bornstein A.M., **Shenhav A.** (2018). Model-based decision making is associated with structure inference ability. Society for Neuroeconomics. [Talk]
- 32. †Froemer R., **Shenhav A.** (2018). Sum before difference: ERPs reveal differential temporal contributions of overall set value and value difference. Society for Neuroeconomics. [Poster]
- 33. <sup>†</sup>Bustamante L., Lieder F., Musslick S., **Shenhav A.**, Cohen J. D. (2018). Learning to overexert cognitive control in the Stroop task. Computational Cognitive Neuroscience Conference. [Poster]
- 34. †Bustamante, L.A., Burton, A., Baker, A., Hoeber, C., **Shenhav, A.**, Daw, N.D., Cohen, J.D. (2018). Novel methods for measuring the cost of cognitive control in a patch foraging task and a demand selection task with Stroop. Cognitive Science Society. [Poster]
- 35. **Shenhav A.**, Musslick S., Botvinick M.M., Cohen J.D. (2018). Weighing the costs and benefits of mental effort. Association for Psychological Science Annual Meeting. [Talk]
- 36. Kane G.A., James M.H., **Shenhav A.**, Wilson R.C., Daw N.D., Aston-Jones G., Cohen J.D. (2018). Does the anterior cingulate contribute to foraging decisions? Cosyne. [Poster]
- 37. †Froemer R., †Dean Wolf C.K., **Shenhav A.** (2018). What to choose? Goals determine the effect of set value on the speed of value-based decisions. Cognitive Neuroscience Society. [Poster]
- 38. †Ritz H., **Shenhav A.**( 2018). The influence of predictability and parametrically varying conflict level on performance and cognitive control. Cognitive Neuroscience Society. [Poster]
- 39. †Dean Wolf C.K., †Cory E.V., **Shenhav A.** (2018). The influence of expected reward and efficacy on cognitive effort allocation. Cognitive Neuroscience Society. [Poster]
- 40. <sup>†</sup>Xu, A., **Shenhav A.** (2018). The role of negative feedback in the experience and allocation of effort. Society for Affective Science. [Poster]
- 41. **Shenhav A.**, Karmarkar U.R. (2018). Dissociable Mechanisms for Evaluation Involved in Appraising a Set Versus Choosing From It. Society for Judgment and Decision-Making. [Talk] Association for Consumer Research. [Talk]

# **Teaching Experience**

Course Instructor

2023 CLPS 1480M: Motivation and Effort.

Brown University, 22 enrolled.

Average rating: 1.31. [1-5 scale, 1: "very effective"]

2016-2022 CLPS 1495: Affective Neuroscience.

Brown University, 16-24 enrolled.

Average rating: 1.17. [1-5 scale, 1: "very effective"]

2017-2020 CLPS 1900: Research Methods and Design.

Brown University, 17-23 enrolled.

Average rating: 1.11. [1-5 scale, 1: "very effective"]

Teaching Fellow

Summer 2010 Mind, Brain, & Behavior S-92: Visual Neuroscience.

Harvard University Summer Study Abroad (Trento, Italy).

Rating: 4.9. [1-5 scale, 5: "very effective"]

Summer 2010 Mind, Brain, & Behavior S-101: Windows into the Structure of Mind/Brain.

Harvard University Summer Study Abroad (Trento, Italy).

Rating: 4.5. [1-5 scale, 5: "very effective"]

Spring 2010 Psychology 1901: Methods of Behavioral Research.

Harvard University.

Rating: 4.6. [1-5 scale, 5: "very effective"] \*Received Derek Bok Center Teaching Award.

# Mentoring

#### Postdoctoral Fellows

2023-Present	Hayley Brooks, PhD, Postdoctoral Research Associate, <i>Brown University</i>
2021-Present	Amanda Arulpragasam, PhD, Postdoctoral Research Associate, Brown University
2020-Present	Ivan Grahek, PhD, Postdoctoral Research Associate, Brown University
2019-Present	Debbie Yee, PhD, Postdoctoral Research Associate, Brown University
2017-22	Romy Frömer, PhD, Postdoctoral Research Associate, Brown University

### **Graduate Students**

2023- Present	Ziwei Cheng, PhD Student, Brown University
2022- Present	Yi-Hsin Su, PhD Student, Brown University
2019- Present	Mahalia Prater Fahey, PhD Student, Brown University
2018- Present	Xiamin (Jason) Leng, PhD Student, Brown University
2016-22	Harrison Ritz, PhD Student, Brown University

## Research Assistants

2023 - Present	Meriel Doyle, Brown University
2022- Present	Adanne Ogbaa, Brown University
2021-23	Joonhwa Kim, Brown University
2019-21	SarahMay (Maisy) Tarlow, Brown University
2016-20	Carolyn Dean Wolf, Brown University
2013-15	Mark Straccia, Princeton University

# Undergraduate Research Assistants

# Brown University

Maja Nieweglowska, 2021-22	Noa Mintz, 2019-21
Kaila Zimnavoda, 2021-22	Arden Orwitz, 2019-21
Chris Bravo, 2020-22	Alessandra Bianco, 2020
Keelin Lyons, 2020-22	Anna Park, 2020
Selin Baydar, 2019-22	Gloria Feng, 2019-20
Ali Zaidi, 2021	Allegra Friedman, 2019
Linda Zhang, 2018-21	Savannah Doelfel, 2019
Alice Bai, 2020-21	Felicia Renelus, 2018-19
Peyton Strong, 2020-21	Akari Izumi, 2018-19
Thomas Summe, 2020-21	Paulina Sengiridis, 2018-19
	Kaila Zimnavoda, 2021-22 Chris Bravo, 2020-22 Keelin Lyons, 2020-22 Selin Baydar, 2019-22 Ali Zaidi, 2021 Linda Zhang, 2018-21 Alice Bai, 2020-21 Peyton Strong, 2020-21

Allison Loynd, 2017-19 Hattie Xu, 2017-19 Ailita Eddy, 2018 Isabel Shaw, 2018 Elizabeth Cory, 2017-18		Milena Rmus, 2017-18 Wasita Mahaphanit, 2016-18 Anna Xu, 2016-18 Cora Ordway, 2017-18 Michelle Basta, 2017	William McNelis, 2017 Kia Sadahiro, 2016-17 Ayenna Cagaanan, 2016-17
Princeton University Carrie Chen, 2015-16		George Jian, 2014-15	Doris Voina, 2013
Harvard University Alex Tancredi, 2011-12 Sophie Scolnik-Brower, 2011-12 Brogan Berry, 2011-12 Emma Golen, 2011-12		Christine Matera, 2010-11 Devon Long, 2011 Claire Wheeler, 2010 Ricky Kuperman, 2009-10	Margaret Cochran, 2009 Ting Zhang, 2009 Pierina Sanchez, 2009
Undergradua	te thesis advisees		
2022-23	effort"	<i>University</i> , "Learning about task difficence Sher premium for research excellence	•
2022-23	Kaitlyn Mundy, <i>Brown</i> Incentives on Cognitive	<i>University</i> , "The Influence of Learned	Positive and Negative Motivational
2021-22	performance efficacy a	University, "Does your effort matter for and penalty in cognitive control allocation of the control end of the control exception of the control except of	on"
2020-21	Rewards on the Motiva	<i>University,</i> "Make-or-break: The Influentation and Experience Associated with College of the	Cognitive Effort Exertion"
2019-20		University, "Are Distractors really that I rocessing in Older Adults" (co-advised)	
2017-18	Milena Rmus, <i>Brown</i> learning ability"	University, "Model-based decision mak	ing is associated with structure
2017-18		<i>University</i> , "Learning the efficacy of conversion of the variable of the vari	-
2017-18	Wasita Mahaphanit, B	rown University, "The Cost of having b	etter alternatives"
2017-18	Anna Xu, <i>Brown Univ</i> experience and allocat	ersity, "Do you ever get tired of being vion of physical effort"	wrong? The role of feedback in the
2015-16		<i>n University,</i> "Motivational Learning: T Is on Estimates of Future Performance"	
2011-12		ed University, "Choice Size, Value, and ated Stress and Regret"	Perceived Freedom of Choice:
2011-12	Sophie Scolnik-Browe Beliefs"	r, Harvard University, "Holy Crap!: Th	ne Role of Disgust in Religious

# High School Students

2022 Ariella Reynolds, Avon High School, Avon, CT

2019 Natalie Cardoso, *Lynbrook High School, Lynbrook, NY* 

2011 Brian Trippe, *Milton Academy, Milton, MA* 

2011 Mattia Pizzagalli, Winchester High School, Winchester, MA

### First-Year Exam and Preliminary Exam Committees

Krishn Bera, *Brown University* Victoria Halewicz, *Brown University* 

Ziqi Zhao, Brown University

Guillaume Pagnier, Brown University Alana Jaskir, Brown University Jason Leng, Brown University Alex Fengler, Brown University Jessica Emerson, *Brown University*Daniel Scott, *Brown University* 

Nadira Yusif Rodriguez, Brown University

Joseph Heffner, *Brown University* Harrison Ritz, *Brown University* Ceyda Sayali, *Brown University* 

### Dissertation Committees

Pradyumna Sepulveda, *University College London*Shengjie Xu, *Ghent University*Anusha Allawalla, *Brown University*Haijing Wu Hallenbeck, *Washington Univ in St. Louis*Harrison Ritz, *Brown University*Joseph Heffner, *Brown University* 

Andrew Lynn, *Brown University*Nadira Yusif Rodriguez, *Brown University*Laura Bustamante, *Princeton University*Catherine Insel, *Harvard University*Ceyda Sayali, *Brown University* 

#### Ad Hoc Referee

Fellowships:

National Science Foundation

#### Grants:

Department of Defense | European Research Council | ETH Zurich Research Commission | Israel Science Foundation | National Science Foundation | Natural Sciences and Research Council of Canada

## *Journals* (40+):

Behavioral and Brain Sciences | Biological Psychiatry | Brain | Cognitive Affective and Behavioral Neuroscience | Cerebral Cortex | Cognition | Cognitive Psychology | Cognition and Emotion | Current Directions in Psychological Sciences | Development and Psychopathology | Developmental Psychology | Developmental Review | eLife | Emotion | Frontiers in Psychology | Human Brain Mapping | Journal of Cognitive Neuroscience | Journal of Experimental Psychology: General | Journal of Experimental Psychology: Human Perception & Performance | Journal of Experimental Social Psychology | Journal of Neuroscience | Judgment and Decision Making | Motivation Science | Nature Communications | Nature Human Behaviour | Nature Neuroscience | NeuroImage | Neuropsychologia | Neuroscience and Biobehavioral Reviews | Neuron | NPG Science of Learning | Proceedings of the National Academy of Sciences | PLOS ONE | Perspectives on Psychological Sciences | Psychological Science | Psychological Review | Psychonomic Bulletin and Review | Science | Social Cognitive and Affective Neuroscience | Thinking and Reasoning | Trends in Cognitive Sciences | WIREs Cognitive Sciences

#### **Editorial Board Member:**

2022- Present Journal of Experimental Psychology: General

2019- Present Affective Science

2018- Present Social Cognitive and Affective Neuroscience

### **Professional Service**

2019- Present	Co-Organizer, Curiosity, Creativity, and Complexity conference. New York, NY.
2021- Present	Member, Program Committee. Annual conference of the Society for Neuroeconomics.
2022	Member, Award Committee. Annual conference of the Society for Neuroeconomics.
2021-22	Chair, Social Committee. Multidisciplinary Conference on Reinforcement Learning and Decision
	Making.
2016-	Co-Founder and Co-Organizer, New England Research on Decision-Making consortium.
2019-20	Chair, Program Committee. Annual conference of the Society for Affective Science. San
	Francisco, CA.
2018-19	Member, Program Committee. Annual conference of the Society for Affective Science. Boston,
	MA.
2018-19	Member, Publications Committee. Society for Affective Science.
2017-18	Member, Program Committee. Annual conference of the Society for Affective Science. Los
	Angeles, CA.
2016-17	Member, Local Organizing Committee. Annual conference of the Society for Affective Science.
	Boston, MA.

# **University Service**

2023- Present	Graduate Advisor, Psychology and Cognitive Science Ph.D. programs
2022- Present	Chair, CLPS Information Technology & Communications Committee
2020- Present	Member, CLPS Diversity and Inclusion Action Plan Committee
2020- Present	Member, University Commencement Speaker Selection Committee
2019- Present	Advisor, Cognitive Brown-Bag Seminar
2017- Present	Area Specialist, Behavioral Decision Sciences Concentration
2019-23	Undergraduate Advisor, Cognitive Neuroscience Concentration
2022-23	Diversity Representative, Social/Cognitive Psychology Search Committee
2022	Co-Chair, CLPS Hiring Plan Committee
2021-22	Chair, Whalen Award Committee
2019-21	Undergraduate Advisor, First-Year Students
2021	Member, Carney Institute Graduate Awards Committee
2019	Graduate Advisor, Cognitive Science
2017-18	Co-Chair, Brown Institute for Brain Science Junior Faculty Development committee
2017	Member, Undergraduate Honors Thesis Committee
2017	Member, Graduate Recruitment Weekend Committee

# **Pre-Doctoral Research Experience**

2005-07	Research Assistant / Lab Manager, UC Berkeley. PI: Michael Silver Ph.D.
2003-05	Research Assistant, UC Berkeley. PI: Mark D'Esposito M.D.
2005	Research Assistant, Ernest Gallo Clinic & Research Center / UC San Francisco. PIs: Howard
	Fields M.D., Ph.D. / Michael Rowbotham M.D
2004	Student Researcher, University of Hyderabad (India). PI: Bapi Raju Ph.D.
2003	Laboratory Assistant, UC Los Angeles. PI: Arthur Toga Ph.D.