David M. Freestone

Assistant Professor
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Faculty Positions

William Paterson University 2017-
Assistant Professor

Bucknell University 2015-2017
Visiting Assistant Professor

Postdoctorate

Neuroeconomics and Monkey electrophysiology 2012-2105
Center for Neural Science
New York University
Mentor: Paul Glimcher

Graduate (Ph.D)

Experimental Psychology 2007-2012
Department of Psychology
Brown University
Dissertation: Timing Uncertainty and Reward Rate Maximization
Mentor: Russell Church

Undergraduate (B.A.)

Majors: Psychology, History 2003-2007
Rutgers University
Center for Cognitive Science
Mentor: Randy Gallistel

Courses taught

Introduction to Psychology · Psychological Statistics
Sensation & Perception · Learning
Research Methods · Research Methods in Learning
Neuroeconomics

Software Development

All the lab software, including the code for all new publications is shared on github.

Society Memberships

2016- : Pavlovian Society
2012- : Society for Neuroeconomics
2011–2013: Comparative Cognition (CO_3)
2010–2012: Eastern Psychological Association of Graduate Students (Founding Secretary)
2009– : Eastern Psychological Association (EPA)
2008–2013: Society for the Quantitative Analysis of Behavior (SQAB)
2007– : Society for Neuroscience (SfN)

Ad hoc reviewer

Journal of Experimental Analysis of Behavior
Journal of Experimental Psychology: General
Journal of Experimental Psychology: Animal Learning & Cognition
Behavioral Processes
International Journal of Comparative Psychology
Timing & Time Perception
Philosophical Transactions of the Royal Society
European Journal of Social Psychology

Publications (by date)

Stevenson, J. R., S. M. Wenner, D. M. Freestone, C. C. Romaine, M. C. Parian, S. M. Christian, A. E. Bohidar, J. R. Ndem, I. R. Vogel, and C. M. O'Kane (2017) Oxytocin reduces alcohol consumption in prairie voles, Physiology & Behavior, 179, 411-421.

Kheifets, A., Freestone, D., & Gallistel, C. R. (2017). Theoretical implications of quantitative properties of interval timing and probability estimation in mouse and rat. Journal of the Experimental Analysis of Behavior, 108(1), 39-72.

Berkay, D., Freestone, D., & Balcı, F. (2016). Mice and rats fail to integrate exogenous timing noise into their time-based decisions. Animal cognition, 19(6), 1215-1225.

Freestone, D. M., & Church, R. M. (2016). Optimal timing. Current Opinion in Behavioral Sciences, 8, 276-281.

Freestone, D. M., Balcı, F., Simen, P., & Church, R. M. (2015). Optimal response rates in humans and rats. Journal of Experimental Psychology: Animal Learning and Cognition, 41(1), 39.

Kalafut, K,. Freestone. D.M., MacInnis, M.L.M, & Church, R.M (2014). Integrating Timing and Conditioning Approaches to Study Behavior. Journal of experimental Psychology: Animal Learning & Cognition, 40, 431-9

Church, R.M, Miller, M.C, Freestone, D., Osgood, D.P., Machan, J.T., Chiu, C., Messier, A.A., Johanson, C.E., & Silverberg, G.D. (2014). The Relationship of Amyloid Accumulation, Cognition, and Age of Rats. Behavioral Neuroscience, 128, 523-36.

Gallistel, C.R., Balci, F., Freestone, D., Kheifets, A., & King, A. (2014). Automated, Quantitative Cognitive/Behavioral Screening of Mice: For Genetics, Pharmacology, Animal Cognition and Undergraduate Instruction. Journal of Visualized Experiments.

Freestone, D.,MacInnis, M., & Church, R.M. (2013) Response rates are governed more by time cues than contingency. Timing and Time Perception, 1 (1), 3-20.

Krueger, J. I., Freestone, D., & McInnis, M. L. (2013). Comparisons in research and reasoning: Toward an integrative theory of social induction. New Ideas in Psychology, 31, 73-86.

Krueger, J. I., Freestone, D., & DiDonato, T. E. (2012). Twilight of a dilemma: A Réplique. Psychological Inquiry, 23, 85-100.

Krueger, J. I., DiDonato, T. E., & Freestone, D. (2012). Social projection can solve social dilemmas. Psychological Inquiry, 23, 1-27.

Balci, F., Freestone, D., Simen, P., DeSouza, L., Holmes, P., & Cohen, J. (2011). Optimal temporal risk assessment. Frontiers in Integrative Neuroscience, 5: 1–15.

Gallistel. CR., King, A.P., Daniel, A.M., Freestone, D., Papachristos, E.B., Balci, F., Kheifets, A., Zhang, K., Su, X., Schiff, G., & Kourtev, H. (2010). Screening for learning and memory mutations: A new approach. Acta Psychologica Sinica, 42(1): 1–21.

Freestone, D. & Church, R.M. (2010). The importance of the reinforcer as a time marker. Behavioural Processes, 84(1): 500–505.

MacInnis, M., Marshall, A., Freestone, D., & Church, R.M. (2010). A simultaneous temporal processing account of response rate. Behavioural Processes, 84(1): 506–510.

Balci, F., Freestone, D., & Gallistel, C.R. (2009). Risk assessment in man and mouse. PNAS, 106(7): 2459–2463.

Book Chapters

Freestone, D.M., & Balci, F. (in press). Temporal Decision-Making: Common Procedures and Contemporary Approaches. In Tucci, V. (Eds.). Handbook of Neurobehavioral Genetics and Phenotyping.

Freestone, D., & Balci, F. (2016). The Biological Basis of Economic Choice. Handbook of Neurobehavioral Genetics and Phenotyping, 143-178.

Gallistel, C. R., Balci, F., Freestone, D., Kheifets, A., & King, A. (2017). A Cognitive Neurogenetics Screening System with a Data-Analysis Toolbox. Handbook of Neurobehavioral Genetics and Phenotyping, 507-526.

Conferences

Proceedings Simen, P., Van Vugt, M., Balci, F., Freestone, D., and Polk, T. (2010). Toward an analogneural substrate for production systems. Proceedings of the International Conference on Cognitive Modeling.

Presentations

Greg Jensen & Freestone, D.M. (2016). Computational Prometheus: Stealing "Reinforcement" back from Computer Science. American Psychological Association.

Freestone, D.M. (2016). Dopsamine stimulation causes abrupt preference reversals. Invited neuroscience speaker series.

Krueger, J.I., Freestone, D.M., & Heck, P. (2014). Social projection in the inductive reasoning model. European Association for Social Psychology

Krueger, J.I., DiDonato, T.E., & Freestone, D. (2012). Last minute intrigue. [Conference in Germany, in April]

Church, R.M., MacInnis, M., & Freestone, D. (2011). A modular theory of simple conditioning. Comparative Cognition Conference.

Balci, F., Freestone, D., & Gallistel, C.R. (November, 2008). Optimal decision making by man and mouse in an interval timing task. Society for Neuroscience (selected for and published in the Society for Neuroscience media book).

Posters

Freestone, D.M., & Myers, K.P. (October, 2016). The effects of habitual sugar consumption on interval timing in rats. Pavlovian Society.

Nentwig, T.B. & Freestone, D.M. (October, 2016). (Mis)estimating the Fixed Interval Gradient. Pavlovian Society.

Freestone, D.M., Grattan, L, Rutledge, R., Louie, K., Glimcher, P. (2015). Ventral tegmental dopaminergic stimulation causes preference reversals. Society for Neuroscience.

Church, R.M., Miller, M.C., Freestone, D., Osgood, D.P., Machan, J.T., Chiu, C., Messier, A.A., Silverberg, G.D. (2011). Aging, alzheimer's disease, amyloid clearance, and cognition. Society for Neuroscience.

Marshall, A., MacInnis, M., Freestone, D., & Church, R. M. (2011). The effects of stimulus probability and position on simultaneous temporal processing. Society for the Quantitative Analysis of Behavior.

Freestone, D. (2011) A simple graphical user interface for behavioral simulations. Comparative Cognition Conference.

Hartley, A. G., Wright, J. C., & Freestone, D. (2010). Assessing personality across situations: When standardized assessments conflict with lay impressions. Association for Psychological Science.

Geana, A., Freestone, D., & Church, R.M. (2010). Exploration as a mechanism of change-detection. Society for the Quantitative Analysis of Behavior.

Freestone, D., Balci, F., Simen, P. (2010). Time is money and we lose it wisely. Society for Neuroscience.

Freestone, D. & Church, R.M. (2009). The importance of the reinforcer as a time marker. Society for the Quantitative Analysis of Behavior.