TIM PLESKAC

Professor of Psychological & Brain Sciences and Cognitive Science, Indiana University

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- **♀** Bloomington, IN, United States
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RESEARCH

I study how people make judgments and decisions; how these processes shape behavior at the individual, group, and organizational level; and how we can help people make better judgments and decisions. I investigate these questions with computational modeling and methods from the behavioral and cognitive sciences.

EXPERIENCE

Professor of Psychological & Brain Sciences and Cognitive Science

Indiana University

- ## 2023 Ongoing
- ♥ Bloomington, IN
- I direct the IU Behavioral Science Laboratory. We use computational models to understand better the mental processes involved in making a decision.

Professor of Psychology; Chair of Psychology University of Kansas

- Directed the development of the Brain, Behavior, & Quantitative Science Program in the Department of Psychology.
- Direct the Kansas Data Science Consortium to create a state-wide data science training program.
- As Chair, I oversaw a department of 33 total faculty, 87 graduate students, 1,326 undergraduate majors, and an active clinic.

Senior Scientist

Center for Adaptive Rationality, Max Planck Institute for Human Development

2014-2018

- Perlin, Germany
- Helped lead an interdisciplinary research center composed of 30 researchers managing research personnel and the research portfolio
- At the Center, I also trained researchers in computational modeling and led initiatives to develop reproducible science pipelines.

Associate, Assistant Professor

Michigan State University

2007-2014

- **Q** East Lansing, MI
- Directed the Laboratory for Cognitive and Decision Sciences, chaired the quantitative program, and chaired a successful faculty search.
- Key accomplishments include earning an NSF CAREER Award and being named the MSU College of Social Science Outstanding Teacher.

POST DOCTORAL

NIMH Postdoc Research Fellow Cognitive Science, Indiana University

2006-2007

♥ Bloomington, IN

Research Scientist

Center for Cognitive & Decision Science, University of Basel

2004-2006

Pasel. Switzerland

EDUCATION

Ph.D. Psychology

University of Maryland-College Park

2003-2004

♥ College Park, MD

M.Sc. Psychology

University of Maryland-College Park

2000-2003

♥ College Park, MD

B.Sc. Psychology cum laude University of Iowa

1996-2000

♀ Iowa City, IA

NOTEWORTHY



President, 2023-2025

Society for Mathematical Psychology

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Elected to Society for Experimental Psychology, 2024



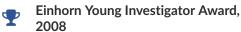
Jane Beattie Scientific Recognition Award. 2015

European Association for Decision Making



Outstanding Teacher Award, 2013 MSU College of Social Science

NSF CAREER Award, 2010
National Science Foundation



Society for Judgment & Decision Making

CURRENT SUPPORT

Modeling the dynamics of belief formation: Towards a computational understanding of the timing and accuracy of probability judgments

NSF

2021-2024

◊ Indiana University

Award Number SES 212112 Role Principal Investigator Amount \$692,123

PENDING SUPPORT

Doctoral Dissertation Research: Mapping context effects across preference, perceptual, and belief based judgments

NSF

2024-2025

♀ Indiana University

Role Principal Investigator

Amount \$29,957

Optimizing computational modeling strategies for the prospective prediction of externalizing behavior in a large community sample of youth (PI: Alex Weigard and Dan Keatingat UofM)

National Institute of Mental Health Ro1

2024 - 2029

University of Michigan

Role Co-Investigator

Amount \$154,221 (Direct Costs via Sub Contract)

Neurocomputational Mechanisms of Aberrant Gaze Perception and Social Dysfunction (PI: Scott Blain at OSU)

National Institute of Mental Health 1K01MH137512-01

2024 - 2029

Ohio State University

Role Mentor

Amount \$884,790

Establishing personalized treatment strategies on reward dysfunctions in eating disorders (PI: Yiyang Chen at KU)

National Institute of Mental Health 1K99MH137252-01

2024 - 2029

♀ University of Kansas

Role Mentor

Amount \$216,000 for K training phase

PAST SUPPORT

NSF OIA 2148878, RII Track-1: Adaptive and Resilient Infrastructures driven by Social Equity (ARISE)

NSF

2022-2027

University of Kansas

Role Principal Investigator (Leader of Kansas Data Science Consortium Traning Component) (PI: Belinda Sturm) **Amount** \$20,000,000 (Responsible for \$3.2 million)

Understanding Race Bias in the Decision to Shoot with an Integrated Model of Decision Making

National Science Foundation

Michigan State University

Award Number SBE 1756092

Role Senior Personnel Amount \$406,003

A victim-centered analysis of active shooter civilian training programs

University of Kansas

2020-2021

♀ University of Kansas

Role Co-PI

Amount \$18,000

Curriculum Innovation Program for BS Behavioral Neuroscience

Center for Teaching Excellence

₩ 2020

University of Kansas

Role Colnvestigator Amount \$10,000

Small Grants for Course Transformation Forming Data I: Foundations of Data Science

Center for Teaching Excellence

2020

Q University of Kansas

Role Principal Investigator

Amount \$3,000

Collaborative Research: Comparing single- vs. double-blind review of scientific abstracts for accuracy and bias

National Science Foundation

2018-2020

♀ University of Kansas

Award Number SBE 1824259

Role Principal Investigator

Amount \$111,702 (total acrross proposals \$299,999)

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ISTART: Neural Mechanisms of Preference Formation During Risky Decision Making

National Institutes of Health

2013-2014

Michigan State University

Award Number R03DA033455-01A1

Role Principal Investigator Amount \$150,000 (Direct)

CAREER: Bringing a dynamic, stochastic, and computational, understanding to subjective probabilities

National Science Foundation

2010-2015

Michigan State University

Award Number SBE 0955410
Role Principal Investigator
Amount \$510,444

Advisor for Peter Kvam's NSF Graduate Research Fellowship

National Science Foundation

2010-2015

♥ Michigan State University

Award Number DGE-142871

Role Advisor

Follow-up of Participants in College Board Study of Noncognitive Determinants of College Student Performance

College Board

2008-2010

Michigan State University

Role Senior Personnel Amount \$258,260

PUBLICATIONS

Unless volume and pages are listed, papers listed in the current year are officially in press. Starting in 2016, all papers I publish list contributions in the author note. I note my Ph.D. or Post Doctoral students (*), papers I was supervising/senior author (†), and papers where there was joint first authorship (♦) below.

Books

Hertwig, R., Pleskac, T. J., Pachur, T., & Center for Adaptive Rationality. (2019). Taming Uncertainty. Cambridge, MA, MIT Press. https://doi.org/10.7551/mitpress/11114.001.0001

Journal Articles

- Tump*, A. N., Deffner, D., Pleskac, T. J., Romanczuk, P., & Kurvers, R. H. (2024). A cognitive computational approach to social and collective1 decision-making. *Perspectives on Psychological Science*. https://doi.org/10.1177/17456916231186964
- Cai, X., & Pleskac, T. J. (2023). When alternative hypotheses shape your beliefs: Context effects in probability judgments. *Cognition*, 231, 105306. https://doi.org/10.1016/j.cognition.2022.105306

- Epping, G. P., Kvam, P. D., Pleskac, T. J., & Busemeyer, J. R. (2023). Open system model of choice and response time. *Journal of choice modelling*, 49, 100453. https://doi.org/10.1016/j.jocm.2023.100453
- Pleskac, T. J., Yu, S., Grunevski, S., & Liu, T. (2023). Attention biases preferential choice by enhancing an option's value. *Journal of Experimental Psychology: General*, 152(4), 993–1010. https://doi.org/10.1037/xge0001307
- Adaryukov*, J., Grunevski, S., Reed, D. D., & Pleskac†, T. J. (2022). I'm wearing a mask, but are they?: Perceptions of self-other differences in covid-19 health behaviors. *PloS one*, 17(6), e0269625. https://doi.org/10.1371/journal.pone.0269625
- Hertwig, R., Leuker*, C., Pachur, T., Spiliopoulos, L., & Pleskac, T. J. (2022). Studies in ecological rationality. *Topics in Cognitive Science*, 14(3), 467–491. https://doi.org/10.1111/tops.12567
- Lasagna*, C. A., Pleskac†, T. J., Burton, C. Z., McInnis, M. G., Taylor, S. F., & Tso, I. F. (2022). Mathematical modeling of risk-taking in bipolar disorder: Evidence of reduced behavioral consistency, with altered loss aversion specific to those with history of substance use disorder. *Computational Psychiatry*, 6(1). https://doi.org/10.5334/cpsy.61
- Pothos, E. M., & Pleskac, T. J. (2022). Rethinking rationality. *Topics in Cognitive Science*, 14(3), 451–466. https://doi.org/10.1111/tops.12585
- Wu*, C. M., Schulz, E., Pleskac, T. J., & Speekenbrink, M. (2022). Time pressure changes how people explore and respond to uncertainty. *Scientific Reports*, 12(1), 1–14. https://doi.org/s41598-022-07901-1
- Kvam, P. D., Busemeyer, J. R., & Pleskac, T. J. (2021). Temporal oscillations in preference strength provide evidence for an open system model of constructed preference. *Scientific Reports*, *11*(1), 1–15. https://doi.org/10.1038/s41598-021-87659-0
- Pleskac†, T. J., Conradt, L., Leuker*, C., & Hertwig, R. (2021). The ecology of competition: A theory of risk-reward environments in adaptive decision making. *Psychological Review*, 128, 315–335. https://doi.org/10.1037/rev0000261
- Ravizza, S. M., Pleskac, T. J., & Liu, T. (2021). Working memory prioritization: Goal-driven attention, physical salience, and implicit learning. *Journal of Memory and Language*, 121, 104287. https://doi.org/10.1016/j.jml.2021.104287
- Albrecht, R., Hoffmann, J. A., Pleskac, T. J., Rieskamp, J., & von Helversen, B. (2020). Competitive retrieval strategy causes multimodal response distributions in multiple-cue judgments. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 46(6), 1064. https://doi.org/10.1037/xlm0000772
- Busemeyer \diamondsuit , J. R., Kvam \diamondsuit , P. D., & Pleskac \diamondsuit , T. J. (2020). Comparison of markov versus quantum dynamical models of human decision making. WIREs Cognitive Science, 11(4), e1526. https://doi.org/10.1002/wcs. 1526
- Leuker*, C., Samartzidis, L., Hertwig, R., & Pleskac†, T. J. (2020). When money talks: Judging risk and coercion in high-paying clinical trials. *PloS one*, 15(1), e0227898. https://doi.org/10.1371/journal.pone.0227898
- Litvinova, A., Herzog, S. M., Kall, A. A., Pleskac, T. J., & Hertwig, R. (2020). How the wisdom of the inner crowd can boost accuracy of confidence judgments. *Decision*, 46(6), 183–211. https://doi.org/10.1037/dec0000119
- Tump*, A. N., Pleskac, T. J., & Kurvers, R. H. (2020). Wise or mad crowds? the cognitive mechanisms underlying information cascades. *Science Advances*, 6(29), eabb0266. https://doi.org/10.1126/sciadv.abb0266
- Bhatia, S., & Pleskac, T. J. (2019). Preference accumulation as a process model of desirable rating. Cognitive Psychology, 109, 47–67. https://doi.org/10.1016/j.cogpsych.2018.12.003
- Busemeyer, J. R., Kvam, P., & Pleskac, T. J. (2019). Markov versus quantum dynamic models of belief change during evidence monitoring. *Scientific Reports*, *9*(1), 1–10. https://doi.org/10.1038/s41598-019-54383-9
- Dai*, J., Pachur, T., Pleskac, T. J., & Hertwig, R. (2019b). What the future holds and when: A description-experience gap in intertemporal choice. *Psychological Science*, 30(8), 1218–1233. https://doi.org/10.1177/0956797619858969
- Leuker*, C., Pachur, T., Hertwig, R., & Pleskac†, T. J. (2019a). Do people exploit risk–reward structures to simplify information processing in risky choice? *Journal of the Economic Science Association*, *5*(1), 76–94. https://doi.org/10.1007/s40881-019-00073-1
- Leuker*, C., Pachur, T., Hertwig, R., & Pleskac†, T. J. (2019b). Too good to be true? psychological responses to surprising options in risk-reward environments. *Journal of Behavioral Decision Making*, 32, 346–358.

- https://doi.org/10.1002/bdm.2116
- Pleskac, T. J., Yu*, S., Hopwood, C., & Liu, T. (2019). Mechanisms of deliberation during preferential choice: Perspectives from computational modeling and individual differences. *Decision*, *6*(1), 77–107. https://doi.org/10.1037/dec0000092
- Schürman*, O., Frey, R., & Pleskac†, T. J. (2019). Mapping risk perceptions in dynamic risk-taking environments. *Journal of Behavioral Decision Making*, 32, 94–105. https://doi.org/10.1002/bdm.2098
- Dai*, J., Pleskac, T. J., & Pachur, T. (2018). Dynamic cognitive models of intertemporal choice. *Cognitive psychology*, 104, 29–56. https://doi.org/10.1016/j.cogpsych.2018.03.001
- Hertwig, R., & Pleskac, T. J. (2018). The construct-behavior gap and the description-experience gap: Comment on Regenwetter & Robinson (2017). Psychological Review, 125(5), 844–849. https://doi.org/10.1037/rev0000121
- Johnson*, D., Cesario, J., & Pleskac, T. J. (2018). How prior information and police experience impacts
 decisions to shoot. *Journal of Personality & Social Psychology*, 115(4), 601–623. https://doi.org/10.1037/
 pspa0000130
- Leuker*, C., Pachur, T., Hertwig, R., & Pleskac†, T. J. (2018). Exploiting risk-reward structures in decision making under uncertainty. *Cognition*, 175, 186–200. https://doi.org/10.1016/j.cognition.2018.02.019
- Pleskac, T. J., Cesario, J., & Johnson*, D. J. (2018). How race affects evidence accumulation during the decision to shoot. *Psychonomic Bulletin & Review*, 25(4), 1301–1330. https://doi.org/10.3758/s13423-017-1369-6
- Johnson*, D. J., Hopwood, C. J., Cesario, J., & Pleskac, T. J. (2017). Advancing research on cognitive processes in social and personality psychology: A hierarchical drift diffusion model primer. *Social Psychological and Personality Science*, 8(4), 413–423. https://doi.org/10.1177/1948550617703174
- Kvam*, P. D., & Pleskac, T. J. (2017). A quantum information architecture for cue-based heuristics. *Decision*, 4(4), 197. https://doi.org/10.1037/dec0000070
- Kvam*, P. D., & Pleskac, T. J. (2016). Strength and weight: The determinants of choice and confidence. *Cognition*, 152, 170–180. https://doi.org/10.1016/j.cognition.2016.04.008
- Uitvlugt, M. G., Pleskac, T. J., & Ravizza, S. M. (2016). The nature of working memory gating in parkinson's disease: A multi-domain signal detection examination. *Cognitive*, *Affective*, & *Behavioral Neuroscience*, 16(2), 289–301. https://doi.org/10.3758/s13415-015-0389-9
- Kvam*, P. D., Pleskac†, T. J., Yu*, S., & Busemeyer, J. R. (2015). Interference effects of choice on confidence: Quantum characteristics of evidence accumulation. *Proceedings of the National Academy of Sciences*, 112(34), 10645–10650. https://doi.org/10.1073/pnas.1500688112
- Yu*, S., Pleskac, T. J., & Zeigenfuse*, M. D. (2015). Dynamics of postdecisional processing of confidence. *Journal of Experimental Psychology: General*, 144(2), 489–510. https://doi.org/10.1037/xge0000062
- Pleskac, T. J., & Hertwig, R. (2014). Ecologically rational choice and the structure of the environment. *Journal of Experimental Psychology: General*, 143(5), 2000. https://doi.org/10.1037/xge0000013
- Pleskac, T. J., & Wershbale*, A. (2014). Making assessments while taking repeated risks: A pattern of multiple response pathways. *Journal of Experimental Psychology: General*, 143(1), 142. https://doi.org/10.1037/a0031106
- Zeigenfuse*, M. D., Pleskac†, T. J., & Liu, T. (2014). Rapid decisions from experience. *Cognition*, 131(2), 181–194. https://doi.org/10.1016/j.cognition.2013.12.012
- Pleskac, T. J., Kvam*, P. D., & Yu*, S. (2013). What's the predicted outcome? explanatory and predictive properties of the qp framework. *Behavioral and Brain Sciences*, *36*(3), 303–304. https://doi.org/10.1017/S0140525X12003093
- McAuley, J. D., Henry, M. J., Wedd, A., Pleskac, T. J., & Cesario, J. (2012). Effects of musicality and motivational orientation on auditory category learning: A test of a regulatory-fit hypothesis. *Memory & cognition*, 40(2), 231–251. https://doi.org/10.3758/s13421-011-0146-4
- Pleskac, T. J. (2012). Comparability effects in probability judgments. *Psychological Science*, 23(8), 848–854. https://doi.org/10.1177/0956797612439423
- Liu, T., & Pleskac, T. J. (2011). Neural correlates of evidence accumulation in a perceptual decision task. *Journal of Neurophysiology*, 106(5), 2383–2398. https://doi.org/10.1152/jn.00413.2011
- Pleskac, T. J., Keeney*, J., Merritt, S. M., Schmitt, N., & Oswald, F. L. (2011). A detection model of col-

- lege withdrawal. *Organizational Behavior and Human Decision Processes*, 115(1), 85–98. https://doi.org/10.1016/j.obhdp.2010.12.001
- Hau*, R., Pleskac, T. J., & Hertwig, R. (2010). Decisions from experience and statistical probabilities: Why they trigger different choices than a priori probabilities. *Journal of Behavioral Decision Making*, 23(1), 48–68.
- Hertwig, R., & Pleskac, T. J. (2010). Decisions from experience: Why small samples? *Cognition*, 115(2), 225–237. https://doi.org/10.1002/bdm.665
- Pleskac, T. J., & Busemeyer, J. R. (2010). Two-stage dynamic signal detection: A theory of choice, decision time, and confidence. *Psychological review*, 117(3), 864–901. https://doi.org/10.1037/A0019737
- Bishara, A. J., Pleskac, T. J., Fridberg, D. J., Yechiam, E., Lucas, J., Busemeyer, J. R., Finn, P. R., & Stout, J. C. (2009). Similar processes despite divergent behavior in two commonly used measures of risky decision making. *Journal of Behavioral Decision Making*, 22(4), 435–454. https://doi.org/10.1002/bdm.641
- Busemeyer, J. R., & Pleskac, T. J. (2009). Theoretical tools for understanding and aiding dynamic decision making. *Journal of Mathematical Psychology*, 53(3), 126–138. https://doi.org/10.1016/J.Jmp.2008.12.007
- Pleskac, T. J., Dougherty, M. R., Rivadeneira, A. W., & Wallsten, T. S. (2009). Random error in judgment: The contribution of encoding and retrieval processes. *Journal of Memory and Language*, 60(1), 165–179. https://doi.org/10.1016/j.jml.2008.08.003
- Schmitt, N., Keeney, J., Oswald, F. L., Pleskac, T. J., Billington, A. Q., Sinha, R., & Zorzie, M. (2009). Prediction of 4-year college student performance using cognitive and noncognitive predictors and the impact on demographic status of admitted students. *Journal of Applied Psychology*, 94(6), 1479.
- Hau*, R., Pleskac, T. J., Kiefer, J., & Hertwig, R. (2008). The description–experience gap in risky choice: The role of sample size and experienced probabilities. *Journal of Behavioral Decision Making*, 21(5), 493–518. https://doi.org/10.1002/bdm.598
- Pleskac, T. J. (2008). Decision making and learning while taking sequential risks. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 34(1), 167. https://doi.org/10.1037/0278-7393.34.1.167
- Pleskac, T. J., Wallsten, T. S., Wang, P., & Lejuez, C. (2008). Development of an automatic response mode to improve the clinical utility of sequential risk-taking tasks. *Experimental and Clinical Psychopharmacology*, 16(6), 555. https://doi.org/10.1037/a0014245
- Pleskac, T. J. (2007). A signal detection analysis of the recognition heuristic. *Psychonomic Bulletin & Review*, 14(3), 379–391. https://doi.org/10.3758/BF03194081
- Wallsten, T. S., Pleskac, T. J., & Lejuez, C. W. (2005). Modeling behavior in a clinically diagnostic sequential risk-taking task. *Psychological Review*, 112(4), 862–880. https://doi.org/10.1037/0033-295X.112.4.862

■ Book Chapters

- Pleskac, T. J., & Hertwig, R. (2023). In decisions from experience what you see is up to your sampling of the world, In *Sampling*. Cambridge, MA, Cambridge University Press.
- Dai*, J., Pachur, T., Pleskac, T. J., & Hertwig, R. (2019a). Tomorrow never knows: Why and how uncertainty matters in intertemporal choice, In *Taming Uncertainty*. Cambridge, MA, MIT Press. https://doi.org/10.7551/mitpress/11114.003.0014
- Hertwig, R., Pleskac, T. J., & Pachur, T. (2019). Reckoning with uncertainty: Our research program, In *Taming Uncertainty*. Cambridge, MA, MIT Press. https://doi.org/10.7551/mitpress/11114.003.0004
- Kozyreva, A., Pleskac, T. J., Pachur, T., & Hertwig, R. (2019). Interpreting uncertainty: A brief history of not knowing. Cambridge, MA, MIT Press. https://doi.org/10.7551/mitpress/11114.003.0026
- Kvam*, P., Hintze, A., Pleskac, T. J., & Pietraszewski, D. (2019). Computational evolution and ecologically rational decision making, In *Taming Uncertainty*. Cambridge, MA, MIT Press. https://doi.org/10.7551/mitpress/11114.003.0022
- Pleskac, T. J., Hertwig, R., Leuker*, C., & Conradt, L. (2019). Using risk-reward structures to reckon with uncertainty, In *Taming Uncertainty*. Cambridge, MA, MIT Press. https://doi.org/10.7551/mitpress/11114. 003.0007
- Wulff*, D., Markant*, D., Pleskac, T. J., & Hertwig, R. (2019). Adaptive exploration: What you see is up to you, In *Taming Uncertainty*. Cambridge, MA, MIT Press. https://doi.org/10.7551/mitpress/11114.003.0012

- Pleskac, T. J. (2015a). Decision and choice: Luce's choice axiom, In *International encyclopedia of the social & behavioral sciences*. Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.43031-X
- Pleskac, T. J. (2015b). Learning models in decision making, In *The Wiley Blackwell handbook of judgment decision making*. Chichester, United Kingdom, John Wiley & Sons. https://doi.org/10.1002/9781118468333.ch22
- Pleskac, T. J., Diederich, A., & Wallsten, T. S. (2015). Models of decision making under risk and uncertainty, In *The oxford handbook of computational and mathematical psychology*. New York, NY, Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199957996.013.10
- Hertwig, R., & Pleskac, T. J. (2008). The game of life: How small samples render choice simpler, In *The probabilistic mind: Prospects for bayesian cognitive science*. Oxford, UK, Oxford University Press.

Conference Proceedings

- Novaes Tump, A., Pleskac, T., Romanczuk, P., & Kurvers, R. (2022). How the cognitive mechanisms underlying fast choices influence information spread and response bias amplification in groups, In *Proceedings of the annual meeting of the cognitive science society*.
- Tump*, A. N., Pleskac, T. J., & Kurvers, R. (2018). The impact of social information on the dynamics of decision making within groups., In 40th annual meeting of the cognitive science society.
- Dai*, J., Pleskac, T. J., & Pachur, T. (2017). A dynamic tradeoff model of intertemporal choice., In 39th annual meeting of the cognitive science society.
- Leuker*, C., Pleskac†, T. J., Pachur, T., & Hertwig, R. (2017). How the mind exploits risk-reward structures in decisions under risk, In 39th annual meeting of the cognitive science society. Cognitive Science Society.
- Markant*, D., Pleskac†, T. J., Diederich, A., Pachur, T., & Hertwig, R. (2015). Modeling choice and search in decisions from experience: A sequential sampling approach, In 37th annual meeting of the cognitive science society. Cognitive Science Society.
- Bucci, D. J., Acharya, S., Pleskac, T. J., & Kam, M. (2014). Subjective confidence and source reliability in soft data fusion, In 2014 48th annual conference on information sciences and systems (ciss). IEEE.
- Wershbale*, A., & Pleskac, T. (2010). Making assessments while taking sequential risks, In Proceedings of the annual meeting of the cognitive science society.
- Pleskac, T. J., & Busemeyer, J. (2007). A dynamic, stochastic theory of confidence, choice, and response time, In *Proceedings of the 29th annual cognitive science society*. Cognitive Science Society Austin, TX.
- Norman, K. L., & Pleskac, T. (2002). Conditional branching in computerized self-administered questionnaires on the world wide web, In *Proceedings of the human factors and ergonomics society annual meeting*. SAGE Publications Sage CA: Los Angeles, CA.

INVITED PRESENTATIONS

Berlin, Germany Invited talk at Max Planck Institute for Human Development; Blinded versus unblinded review: A field study comparing the equity and fairness of review processes; 2023

Bloomington, IN Invited talk at IUB Cognitive Science Program; *Blinded versus unblinded review: A field study comparing the equity and fairness of review processes*; 2023

Bloomington, IN Invited talk at IUB; Using cognitive models to characterize social biases; 2023

Santa Fe, NM Invited talk at Santa Fe Institute; Blinded versus unblinded review: A field study comparing the equity and fairness of review processes; 2021

Fort Collins, CO (Virtual) Invited talk at Colorado State University, Department of Psychology; Comparison of single- and double-blind review of scientific abstracts for a high stakes international conference; 2021

Virtual Brunswik Society Annual Meeting; Why the risk-reward relationship can be a key structure for taming uncertainty; 2020

Columbia, MO (Virtual) Invited talk at University of Missouri, Department of Psychology; Comparison of single- and double-blind review of scientific abstracts for a high stakes international conference; 2020

Kansas City, KS Invited talk at the Kansas City Public Library and Linda Hall Library; Tools for Thinking about Risk During the Pandemic; 2020 Pittsburgh, Pennsylvania Invited talk at Carnegie Mellon University, Center for Behavioral Decision Research; Building a science of small yet significant decisions; 2018

Lincoln, NE Invited talk at the University of Nebraska, Center for Brain, Biology, and Behavior; Building a science of small yet significant decisions; 2018

Lawrence, Kansas Invited talk at the University of Kansas, Department of Psychology; *Building a science of small yet significant decisions*; 2017 **lowa City, lowa** Invited talk at the University of Iowa, Department of Psychology; *Modeling adaptive exploration in decisions from experience*; 2017

London, UK Invited talk at the University College London, Institute of Cognitive Neuroscience; How an adaptive mind tames uncertainty with experience; 2017

East Lansing, Michigan Invited talk at Michigan State University, Department of Psychology; Building a science of small yet significant decisions; 2017

Coventry, UK Quantum Cognition Workshop, hosted at the University of Warwick in collaboration with the 2017 MathPsych/ ICCM Conference; Quantum random walks; 2017

Barcelona, Spain Conference and Workshop on Neural Information Processing Systems (NIPS). NIPS 2016 Workshop "Imperfect Decision Makers: Admitting Real-World Rationality"; Rationality and quantum models of decision making; 2016

Paris, France Brain & Spine Institute (ICM), Symposium on Biology of Decision Making; The dynamic nature of confidence; 2016

Emmetten, Switzerland Workshop on Sequential Sampling Models hosted by University of Basel, Switzerland, The dynamic nature of confidence; 2016

Potsdam, Germany Workshop hosted by University of Warwick on the Nature of Preferences; Modeling the construction of preference with quantum theory; 2016

Newcastle, Australia Invited talk at the University of Newcastle, Psychology Department; Rationality and quantum models of decision making; 2016

Newcastle, Australia Invited talk at the University of Newcastle, Center for Computer Assisted Research Mathematics and its Applications; Modeling belief formation one step at a time; 2016

Sydney, Australia Invited talk at the University of New South Wales, Psychology Department; Modeling the effect of stereotypes on the decision to use deadly force; 2016

Heidelberg, Germany Symposium on the Quantity of Information and Quality of Decisions, hosted by the University of Heidelberg, Alfred Weber Institute, Economics Department; *How an adaptive mind exploits the relationship between risks and rewards*; 2016

Chicago, Illinois Invited talk at the University of Chicago, Booth School of Business. Marketing Department; How an adaptive mind exploits the relationship between risks and rewards; 2015

Budapest, **Hungary** Invited talk for receiving the Jane Beattie Scientific Recognition Award presented at the Conference on Subjective Probability, Utility and Decision Making (SPUDM), hosted by the European Association for Decision Making; *Ecologically rational choice in a structured environment*: 2015

Provence, France Conference on Subjective Confidence: Psychology, Physiology, Theory, hosted by Les Treilles Foundation; *Post decisional processing: Its effects on confidence and belief*; 2015

Basel, Switzerland Invited talk at the University of Basel, Psychology Department; Post decisional processing: Its effects on confidence and belief; 2015

Berlin, Germany Cognitive Neuroscience Forum, hosted by the Frei Universität, Berlin Post decisional processing: Its effects on confidence and belief; 2014

Coventry, UK Decision Research Forum, hosted by the University of Warwick; *Ecologically rational choice in a structured environment*; 2014

Barcelona, Spain Invited talk, Pompeu Fabra University, Department of Economics and Business; *Ecologically rational choice in a structured environment*; 2014

Ann Arbor, Michigan Decision Consortium, hosted by the University of Michigan; How people make decisions under uncertainty; 2014 Chicago, Illinois Invited talk at the University of Chicago, Booth School of Business, Center for Decision Research; Modeling belief formation one time step at a time; 2012

Irvine, California Invited talk at the University of California, Irvine, Department of Cognitive Sciences; Modeling belief formation one time step at a time; 2012

TEACHING

Professional Workshops

- Decision making across the lifespan (1, three-hour session).
- Bayesian data analysis for everyday researchers (6, one-hour sessions)
- Sequential sampling models with an emphasis on drift diffusion models (2, day-long sessions).
- Computational models of decision making (8, one-hour sessions)

Indiana University

Experimental Methods in Cognitive Science; Q560 Fall 2023

Research Methods in Experimental Psychology; P211 Spring 2024

University of Kansas

Data 1: Dealing with data PSYC/POLS/ECON/SOC 199 Spring 2022, Fall 2022

Behavioral Economics; PSYC 513/ECON 513 Fall 2020; Fall 2021 Judgment & Decision Making; PSYC 469 Spring 2019; Fall 2019

Bayesian Data Analysis; PSYC 797/PSYC 698 (initially PSYC 690) Spring 2019; Spring 2020; Spring 2021

Michigan State University

Research Design and Methods

Data analysis in Psychological Research

Introduction to Psychology

Current Topics in Cognitive Science

Higher-Order Cognitive Processes

Cognitive Modeling

Psychology Experiments with E-Prime

University of Basel, Switzerland

Negotiation Theory

Behavioral Game Theory

Mathematical Models in Psychology

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University of Maryland, College-Park

Lab Instructor: Quantitative Methods I and II Lab Instructor: Introduction to Statistics

TA: Memory & Cognition

ADVISING

Post-Doctoral Advisor

Jun Fang 2022-

Joshua Abbott 2017-2018

Shuli Yu 2015-2017

Dirk Wulff 2015-2016

Junyi Dai 2014-2017

Doug Markant 2014-2017

Matt Zeigenfuse 2011-12

Graduate Student Advisor

James Adaryukov (Chancellor's Fellowship) 2020 - Ongoing

Xiaohon Cai 2019 - Ongoing

Charley Wu PhD 2019

Christina Leuker PhD 2018

Peter Kvam PhD 2017

David Johnson PhD 2017

Shuli Yu PhD 2015

Avi Wershbale Masters 2010

Doctoral Committee

Mike Easterday KU Economics

Haoyi Wei KU Economics

Sabrina Gregersen KU

Lauren Bayless KU

Zachary Roman KU

Trevor Swanson KU

Richard Kinai KU

Mark Anderson KU

Kevin Weingarten KU Music

Nina Ra KU Economics

Hiroaki Sakaguchi Warwick University

Helen Steingröver University of Amsterdam

Ash Luckman University of New South Wales

Matt Grizzard MSU

Jonathan Hakun MSU

James Grand MSU

John Dewey MSU

Emily Darowski MSU

Master's Committee

Alan Wedd MSU

Paul Cornwell MSU

Matt Grizzard MSU

David Clare MSU

Briana DeAngelis MSU

Bachelor's Honors Thesis

Renee Kang KU

Brittany Huang KU

Andrii Zakharov, Humboldt University

Patricia Zdziarska MSU

Claudia Passalacqua MSU

Aaron Levin MSU

Torrin Liddell MSU

Alex Jendrusina MSU

J. Ryan Brunton MSU

Pierra Jones Basel

EDITORIAL & REVIEWER EXPERIENCE

Associate Editor Journal of Mathematical Psychology 2023-present **Associate Editor Perspectives on Psychological Science #** 2022 **Associate Editor** JEP: General **2015-2017**; 2020 -2021 **Associate Editor Psychological Science 2016-2019 Guest Editor** topiCS **#** 2020 **Guest Editor Journal of Mathematical Psychology** ₩ 2009 **Editorial Board** Psychonomic Bulletin & Review 2020-Ongoing (Consulting Editor) Psychological Review 2019-Ongoing Journal of Experimental Psychology: General, 2012, 2013, 2014, 2019 - 2020 Journal of Mathematical Psychology 2018 - Ongoing (Consulting Editor) Decision 2016- Ongoing Psychological Science 2012-2015

Steering Committee

Judgment & Decision Making

2017-2019

Journal of Behavioral Decision Making 2015 - Ongoing

Frontiers in Cognitive Science 2010-2014

Acta Psychologica; Attention, Perception & Psychophysics; Behavior Research Methods; Brain Research; Cognition; Cognitive, Affective, and Behavioral; Neuroscience; Cognitive Psychology; Cognitive Systems Research; Decision; Emotion; European Journal of Social Psychology; Frontiers in Cognitive Science; Human Brain Mapping; Journal for the Society of Judgment and Decision Making; Journal of Applied Research in Memory and Cognition; Journal of Behavioral Decision Making; Journal of Behavioral Research; Journal of Experimental Psychology (JEP): General; JEP: Human Perception & Performance; JEP: Learning, Memory, & Cognition; Journal of Mathematical Psychology; Journal of Research in Personality; Management Science; Memory and Cognition; Nature; Neuron; Organizational Behavior & Human Decision Processes; Personality Disorders: Theory, Research, and Treatment; PLOSOne; PNAS; Psychological Review; Psychological Science; Psychonomic Bulletin & Review; Social, Cognitive, & Affective Neuroscience; Topics in Cognitive Science; Theory & Decision; WIRE Cognitive Science; Translational Psychiatry

Grant Review Panel

NSF: Decision, Risk, and Management Science

2020 - 2023

Ad Hoc Grarnt Reviewer

National Science Foundation Air Force Office of Scientific Research Swiss National Science Foundation

Israel Binational Science Foundation

Promotion & Tenure External Letter Writer

2017 1 letter

2018 2 letters

2019 1 letter

2020 1 letter

2021 4 letters

2022 4 letters

2023 1 letter

SERVICE

Professional

- Organized Celebration in Honor of Jerome Busemeyer (9 talks, approx 50 attendees), 2023
- Organized Kansas Data Science Annual Workshop (1 keynote; 9 talks, 30 posters, approx 200 attendees), 2023
- Organized OKJDM Regional Judgment & Decision Making Conference (9 talks, 6 flash talks, approx 50 attendees), 2023
- Organized OKJDM Regional Judgment & Decision Making Conference (Virtual)(created new format, 2 invited speakers, 9 talks, 7 flash talks, approx 50 attendees), 2021
- Organized first ever Society of Judgment & Decision Making Virtual Annual Meeting (created new format, moved to double-blind review, boosted attendance by 150%) (with Julia Minson, Dan Feiler, and Shai Davidai), 2020
- Organized Current Trends in Mathematical Psychology Satellite Meeting (Montreal, CA), 2019
- Chaired Senior Fellow Award for Mathematical Psychology Award Committee, 2019
- Designed Senior Fellow Award for the Society for Mathematical Psychology, 2018
- Chair de Finetti Young Investigator Award, 2019

- Executive Board, Society for Mathematical Psychology, 2017 2019; 2021 -
- Executive Board, European Association for Decision Making, 2017–2019
- Jane Beatie scientific recognition award committee, 2016 Ad hoc reviewer for SJDM meeting, 2016
- Chair of Einhorn young investigator award committee for SJDM, 2012, 2013, 2014
- Einhorn young investigator award committee, SJDM, 2010, 2011
- Chair of organizing committee for the first annual Midwest Cognitive Meeting (100 attendees) (now an annual conference rotating around the Midwest), 2011
- ullet Co-chair of first bi-annual conference on Cognitive Decision Theory / Wallsten Festschrift (\sim 40 attendees) 2012
- Program committee for annual meeting of the Cognitive Science Society, 2010, 2011, 2012

University of Kansas

- Member of KU Chief Information Security Officer Search Committee, 2022
- Chair of Search Committee for Assistant Professor of Psychology (Computational Neuroscience), Department of Psychology, 2021
- Member of KU Research Technology Workgroup, Office of Research, 2021
- Member of KU Faculty Advisory of COVID Preparation, ad hoc, 2020
- Chair of Search Committee for Assistant Professor of Psychology, Department of Psychology, 2019
- CLAS Quant Literacy Center Work Group, College of Liberal Arts & Sciences, 2019 2020
- Chair of Search Committee for Visiting Assistant Professor of Psychology (Quantitative), Department of Psychology, 2019
- Post-tenure review committee, Department of Psychology, 2019
- CLAS Quantitative Pathways: Non-STEM Majors Subcommittee, College of Liberal Arts and Sciences, 2019
- Program Director; Brain, Behavior, & Quantitative Science Program, Department of Psychology, 2018 Ongoing
- KU Office of Research Committee on Promotions, KU Office of Research 2018, 2019, 2020
- Chair of ad hoc committee to reorganize Department of Psychology's Cognitive, Quantitative, and Developmental programs (creating the Brain, Behavior, & Quantitative Science Program), 2018

Max Planck Institute for Human Development

- Co-lead Center for Adaptive Rationality (2014–2018)
 - Managed research staff (>40)
 - Oversaw and co-directed multi-million euro interdisciplinary research portfolio.
 - Hired 3 research scientists, 6 post docs, 6 doctoral students.
- External Member of Lifespan Institute Hiring Committee, 2014–2016

Michigan State University

- Chair of Quantitative Search Committee, 2012
- Chair Quantitative Methods and Evaluation Science Concentration, 2011–2013
- Opportunity Hire Committee, 2008
- Member of Cognitive Science Program, 2007–2014
- Cognitive Science Distinguished Speaker Committee, 2008
- Member of Cognition & Cognitive Neuroscience Interest Group at MSU
- Comps Revision Committee, 2010
- Cognitive Interest Group Website Committee, Department of Psychology, 2007, 2008, 2009, 2010

Other institutions

- University of Maryland-College Park Senator,, 2002-2003
- APA-Graduate Student Campus Representative, 2001–2002

Community

- Member of Board of Directors of the Lied Center, 2022 2023
- Member of Board of Directors Jayhawk Chapter of the Quail and Upland Wildlife Federation, 2020 Present
- Treasurer of Woodfield Home Owners Association, 2020–2022