# TIM PLESKAC

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

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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

- Director of Graduate Studies for the Cognitive Science Program.
- PI of 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**

📅 2018 – 2023; Chair: 2022 – 2023    📍 Lawrence, KS

- 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    📍 Berlin, Germany

- Helped lead an interdisciplinary research center composed of 30 researchers managing research personnel and the research portfolio.

### Associate, Assistant Professor

**Michigan State University**

📅 2007–2014    📍 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    📍 Basel, 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

🏆 **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

🏆 **Einhorn Young Investigator Award, 2008**
Society for Judgment & Decision Making

# CURRENT SUPPORT

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

**NSF**

📅 2024–2025        📍 Indiana University

**Award Number**   SES 2417128

**Role**   Principal Investigator

**Amount**   $29,957

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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

MURI: The bias-variance dilemma hidden within human judgment and decision making

**Office of Naval Resarch**

📅 2025–2030        📍 Indiana University

**Role**   Principal Investigator

**Amount**   $7.5 million

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Mapping the social dynamics during a police officer's decision to shoot

**Russel Sage Foundation**

📅 2025–2027        📍 Indiana University

**Role**   Principal Investigator

**Amount**   $200,000

# 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**

📅 2018–2021                                          📍 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

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## Curriculum Innovation Program for BS Behavioral Neuroscience

**Center for Teaching Excellence**

📅 2020                                          📍 University of Kansas

**Role**  CoInvestigator

**Amount**  $10,000

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

**Center for Teaching Excellence**

📅 2020                                          📍 University of Kansas

**Role**  Principal Investigator

**Amount**  $3,000

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## 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)

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## 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

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## Advisor for Peter Kvam's NSF Graduate Research Fellowship

**National Science Foundation**

📅 2010–2015                                    📍 Michigan State University

**Award Number** DGE-142871

**Role** Advisor

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## 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

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## 📄 Journal Articles

- Adaryukov, J. A., Biernat, M., Girard, J. M., Villicana, A. J., & Pleskac, T. (2025). Worth the weight: An examination of unstructured and structured data in graduate admissions. *Decision*. https://doi.org/10.31234/osf.io/j9yeq

- Lasagna, C. A., Tso, I. F., Blain, S. D., & Pleskac, T. J. (2025). Cognitive mechanisms of aberrant self-referential social perception in psychosis and bipolar disorder: Insights from computational modeling. *Schizophrenia Bulletin*, 2024–03. https://doi.org/10.1101/2024.03.30.24304780

- Chen, Y., Forbush, K. T., & Pleskac, T. J. (2024). Bayesian graded response models for eating-disorder risk estimation using screening data. *Computational Brain & Behavior*, 1–19.

- 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◇, J. R., Kvam◇, P. D., & Pleskac◇, 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 college 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.

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## 🖧 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

**Iowa City, Iowa** 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 Informa- tion 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 Proba- bility, 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)

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## Indiana University

**Experimental Methods in Cognitive Science; Q560**  Fall 2023

**Research Methods in Experimental Psychology; P211**  Spring 2024

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## 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**

### 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

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## Associate Editor

**JEP: General**

📅 2015–2017; 2020 –2021

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## Associate Editor

**Psychological Science**

📅 2016–2019

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## Guest Editor

**topiCS**

📅 2020

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## Guest Editor

**Journal of Mathematical Psychology**

📅 2009

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## 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

**Journal of Behavioral Decision Making**  2015 – Ongoing

**Frontiers in Cognitive Science**  2010–2014

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## Steering Committee

**Judgment & Decision Making**

📅 2017–2019

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## Ad Hoc Manuscript Reviewer

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

- 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