

Caitlin Drummond Otten

Arizona State University
School of Human Evolution and Social Change
900 S. Cady Mall #362 Tempe AZ 85281

Email: caitlin.drummond@asu.edu
Phone: (480) 965 4001
ORCID: 0000-0002-6480-170X

Education

2017 Ph.D., Behavioral Decision Research
Carnegie Mellon University, Pittsburgh PA
2014 M.S., Behavioral Decision Research
Carnegie Mellon University, Pittsburgh PA
2012 B.A., Economics; English; Minor: Psychology
University of Pennsylvania, Philadelphia PA

Academic Positions Held

2024- present Affiliated Faculty, Swette Center for Sustainable Food Systems,
Arizona State University, Tempe AZ
2022- present Senior Global Futures Scientist, Global Futures Laboratory,
Arizona State University, Tempe AZ
2020- present Program Lead for Decision Making and Science Communication,
Center for Biodiversity Outcomes,
Arizona State University, Tempe AZ
2020- present Assistant Professor, Decision Science,
School of Human Evolution and Social Change,
Arizona State University, Tempe AZ
2017- 2020 Postdoctoral Research Fellow, Erb Institute,
University of Michigan, Ann Arbor MI

SECTION 1. RESEARCH

Research Summary and Notes (as of 4/26/25)

Peer-Reviewed Journal Publications: Since ASU Affiliation: 14; Total: 22

Google Scholar: h-index: 10; **Citations 2020-present:** 1222; **Total citations:** 1393

Journal Impact indicated by SCOPUS CiteScore.

Authorship Conventions: Lead author is the first author; subsequent authors listed in descending order of contribution. *Denotes graduate student co-author.

Contributions follow CRediT.

External Funding: One award as co-PI, \$1,599,825.00 total with individual investigator recognition of \$319,965 (20%) (**please see note below*)

Research Areas

Behavioral decision research; judgment and decision making psychology; environmental psychology; environmental social science; risk perception; risk communication; public understanding of science; science communication

Publications

Peer Reviewed Journal Article Publications

14. 2025 Sleboda, P., Bruine de Bruin, W., Segrè Cohen, A., **Drummond Otten, C.**, Lutzke, L., & Árvai, J. (2025). Fear, Anger and COVID-19 Risk: A Longitudinal US Study. *Journal of Risk Research*, 1-15.
 - 2023 SCOPUS CiteScore: 12.2
 - Contributions: Conceptualization; investigation; methodology; project administration; writing- review & editing.
13. 2024 *Lutzke, L., **Drummond Otten, C.**, *Sen, S., & Árvai, J. (2024). All atwitter about climate change: do civil and informative Twitter debates influence support for climate policy? *Journal of Risk Research*, 1-21.
 - 2023 SCOPUS CiteScore: 12.2
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; supervision; visualization; writing- review & editing.
12. 2024 Bearth, A., **Drummond Otten, C.**, & Cohen, A. S. (2024). Consumers' perceptions and acceptance of genome editing in agriculture: insights from the United States of America and Switzerland. *Food Research International*, 178, 113982.
 - 2023 SCOPUS CiteScore: 12.5
 - Contributions: Conceptualization; investigation; methodology; project administration; writing- review & editing.
11. 2023 Árvai, J., *Cohen, A. S., *Lutzke, L., & **Drummond Otten, C.** I think, therefore I act, Revisited: Building a stronger foundation for risk analysis. *Risk Analysis*. Published online ahead of print. <https://doi.org/10.1111/risa.14177>
 - 2023 SCOPUS CiteScore: 7.5
 - Contributions: Conceptualization; investigation; methodology; project administration; supervision; writing- review & editing.
10. 2023 Anglin, S., **Drummond Otten, C.**, & Broomell, S. B. Hypothesis Testing Preferences in Research Decision Making. *Collabra: Psychology*, 9(1): 73029. <https://doi.org/10.1525/collabra.73029>
 - 2023 SCOPUS CiteScore: 3.6
 - Contributions: Conceptualization; methodology; project administration; writing- review & editing.
9. 2023 **Drummond Otten, C.**, & Fischhoff, B. Calibration of scientific reasoning ability. *Journal of Behavioral Decision Making*, 36(3), e2306. <https://doi.org/10.1002/bdm.2306>
 - 2023 SCOPUS CiteScore: 4.4
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; visualization; writing- original draft.

8. 2022 **Drummond Otten, C., & Fischhoff, B.** Assessing broader impacts of funded research: the US National Science Foundation v. Lamar Smith. *Science and Public Policy*, 49(2), 313-323.
<https://doi.org/10.1093/scipol/scab082>
 - 2023 SCOPUS CiteScore: 4.5
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; visualization; writing- original draft.
7. 2022 *Cohen, A. S., *Lutzke, L., **Drummond Otten, C., & Árvai, J.** I Think, Therefore I Act: The Influence of Critical Reasoning Ability on Trust and Behavior During the COVID-19 Pandemic. *Risk Analysis*, 42(5), 1073-1085. <https://doi.org/10.1111/risa.13833>
 - 2023 SCOPUS CiteScore: 7.5
 - Contributions: Conceptualization; investigation; methodology; project administration; supervision; writing- review & editing.
6. 2022 *Larkin, C., **Drummond Otten, C., & Arvai, J.** Paging Dr. JARVIS! Will people accept advice from artificial intelligence for consequential risk management decisions? *Journal of Risk Research*, 25(4), 407-422. <https://doi.org/10.1080/13669877.2021.1958047>
 - 2023 SCOPUS CiteScore: 12.2
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; supervision; visualization; writing- review & editing.
5. 2021 Mascatelli, K., **Drummond Otten, C., Piacentini, R. V., Wong-Parodi, G., & States, S.** Comparisons of Sustainability Behaviors Pre-and Early Pandemic Among Botanical Garden Members. *Frontiers in Sustainable Cities*, 3. <https://doi.org/10.3389/frsc.2021.707380>
 - 2023 SCOPUS CiteScore: 4.0
 - Contributions: Conceptualization; data curation; investigation; methodology; project administration; writing- review & editing.
4. 2021 York, A., **Drummond Otten, C., BurnSilver, S., Neuberg, S. & Anderies, J.M.** Integrating institutional approaches and decision science to address climate change: a multi-level collective action research agenda. *Current Opinion in Environmental Sustainability*, 52, 19-26. <https://doi.org/10.1016/j.cosust.2021.06.001>
 - 2023 SCOPUS CiteScore: 13.8
 - Contributions: Conceptualization; writing- original draft.
3. 2020 **Drummond, C., *Gray, S. G., Raimi, K.T., Wilson, R., & Arvai, J.** Public Perceptions of Federal Science Advisory Boards Depend on Their Composition. *Proceedings of the National Academy of Sciences*, 117(37), 22668-22670. <https://doi.org/10.1073/pnas.2012571117>
 - 2023 SCOPUS CiteScore: 19.0
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; supervision; visualization; writing- original draft.

2. 2020 **Drummond, C.**, Siegrist, M. & Arvai, J. Limited effects of exposure to fake news on climate change. *Environmental Research Communications* 2(8), 081003. <https://doi.org/10.1088/2515-7620/abae77>
 - 2023 SCOPUS CiteScore: 3.5
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; visualization; writing- original draft.
1. 2020 Arvai, J., *Gray, S.G., Raimi, K.T., Wilson, R. & **Drummond, C.** Industry-dominated science advisory boards are perceived to be legitimate...but only when they recommend more stringent risk management policies. *Risk Analysis*, 40(11), 2329-2339. <https://doi.org/10.1111/risa.13540>
 - 2023 SCOPUS CiteScore: 7.5
 - Contributions: Conceptualization; investigation; methodology; supervision; writing- review & editing.

Peer-Reviewed Journal Article Publications Prior to ASU Affiliation

8. 2020 **Drummond, C.**, States, S. & Wong-Parodi, G. Factors Associated with the Adoption of Renewable Energy Amongst Botanical Garden Members. *Environmental Research Communications* 2(5), 051005. <https://doi.org/10.1088/2515-7620/ab8a70>
 - 2023 SCOPUS CiteScore: 3.5
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; writing- original draft.
7. 2020 **Drummond, C.** & Fischhoff, B. Emotion and Judgments of Scientific Research. *Public Understanding of Science* 29(3), 319-334. <https://doi.org/10.1177/0963662520906797>
 - 2023 SCOPUS CiteScore: 7.3
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; writing- original draft.
6. 2020 **Drummond, C.** & Fischhoff, B. Predictors of Public Attitudes Toward Controversial Science 1979-1990. *Journal of Risk Research* 23(10), 1318-1335. <https://doi.org/10.1080/13669877.2019.1646313>
 - 2023 SCOPUS CiteScore: 12.2
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; writing- original draft.
5. 2019 *Lutzke, L., **Drummond, C.**, Slovic, P., & Arvai, J. Priming critical thinking: Simple interventions limit the influence of fake news about climate change on Facebook. *Global Environmental Change* 58, 101964. <https://doi.org/10.1016/j.gloenvcha.2019.101964>
 - 2023 SCOPUS CiteScore: 18.2

- Contributions: Conceptualization; investigation; methodology; project administration; supervision; writing- review & editing.
- 4. 2019 **Drummond, C.** & Fischhoff, B. Does “putting on your thinking cap” reduce myside bias in evaluation of scientific evidence? *Thinking and Reasoning* 25(4), 477-505.
<https://doi.org/10.1080/13546783.2018.1548379>
 - 2023 SCOPUS CiteScore: 6.5
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; writing-original draft.
- 3. 2017 **Drummond, C.** & Fischhoff, B. Individuals with greater science literacy and education have more polarized beliefs on controversial science topics. *Proceedings of the National Academy of Sciences USA* 114(36), 9587-9592. <https://doi.org/10.1073/pnas.1704882114>
 - 2023 SCOPUS CiteScore: 19.0
 - Contributions: Conceptualization; data curation; formal analysis; methodology; project administration; visualization; writing-original draft.
- 2. 2017 **Drummond, C.,** & Fischhoff, B. Development and Validation of the Scientific Reasoning Scale. *Journal of Behavioral Decision Making* 30(1), 26-38. <https://doi.org/10.1002/bdm.1906>
 - 2023 SCOPUS CiteScore: 4.4
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; visualization; writing- original draft.
- 1. 2013 Mellers, B., Fincher, K., **Drummond, C.** & Bigony, M. Surprise: a belief on an emotion? *Progress in Brain Research*, 202, 3-19.
<https://doi.org/10.1016/B978-0-444-62604-2.00001-0>
 - 2023 SCOPUS CiteScore: 5.2
 - Contributions: Conceptualization; investigation; methodology; writing- review & editing.

Manuscripts Under Review

- 7. Accepted in principle Anglin, S., Rubinstein, R., Mangracina, B., Shaw, K.M., **Drummond Otten, C.** Registered Report: Personality Stability and Change across the Academic Semester. Accepted in principle at *Frontiers in Psychology*.
 - 2023 SCOPUS CiteScore: 5.3
 - Contributions: Investigation; methodology; project administration; writing- review & editing.
- 6. Revise & resubmit **Drummond Otten, C.**¹, Anglin, S.¹ & Broomell, S.B. Do individuals selectively engage their analytical reasoning abilities? Revise and resubmit at *Journal of Experimental Psychology: Applied*.
 - ¹ Shared first authorship
 - 2023 SCOPUS CiteScore: 4.9

- Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; supervision; writing- original draft.
- 5. Revise & resubmit Cohen, A. S., Bearth, A., & **Drummond Otten, C.** The Role of Actively Open-Minded Thinking in Willingness to Take Civic and Political Action on Genome-Edited Food in the United States and Switzerland. Revise and resubmit at *Frontiers in Psychology*.
 - 2023 SCOPUS CiteScore: 5.3
 - Contributions: Conceptualization; investigation; methodology; project administration; writing- review & editing.
- 4. Revise & resubmit **Drummond Otten, C.**, States, S., & Wong-Parodi, G. Climate and Energy Knowledge and Behavior Amongst Botanical Garden Members. Revise and resubmit at *Energy Research & Social Science*.
 - 2023 SCOPUS CiteScore: 14.0
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; visualization; writing- original draft.
- 3. Revise & resubmit Ruth A., SturtzSreetharan, C. , Beresford, M., Brewis, A., BurnSilver, S., Caseldine, C., Estrada, E., Hruschka, D., Jehn, M., Ilboudo Nébié, E., Knudson, K.J., Kroot, M.V., Maupin, J., Michelaki, K., Morehart, C., Nelson, R.G., **Drummond Otten, C.**, Peeples, M.A., Ranhorn, K.L., Smith, M.E., Stojanowski, C.M., Wutich, A., & York, A. Online Student Engagement in Social Science Research Laboratories: Expert Advice on the Opportunities and Challenges. Invited submission to: *Scholarship and Practice of Undergraduate Research*.
 - SCOPUS CiteScore not available.
 - Contributions: Investigation; writing- review & editing.
- 2. Under review Ruth A., SturtzSreetharan, C., Beresford, M., Brewis, A., BurnSilver, S., **Drummond Otten, C.**, Estrada, E., Hruschka, D.J., Ilboudo Nébié, E., Jehn, M., Maupin, J.N., Nelson, R.G., Wutich, A. & York, A. How to Organize Undergraduate Lab Training: Evidence from 10 Working Social Science Research Labs. Submitted to: *Journal of Further and Higher Education*.
 - 2023 SCOPUS CiteScore: 5.2
 - Contributions: Investigation; writing- review & editing.
- 1. Under review Ruth A., SturtzSreetharan, C., Beresford, M., York, A., Wutich, A., Nelson, R.G., Maupin, J., Jehn, M., Ilboudo Nébié, E., Hruschka, D., Estrada, E., **Drummond Otten, C.**, BurnSilver, S. & Brewis, A. Mentoring in the Social Science Laboratory: Advancing Graduate Student Research and Training. Submitted to: *Mentoring and Tutoring: Partnership in Learning*.
 - 2023 SCOPUS CiteScore: 2.4
 - Contributions: Investigation; writing- review & editing.

Selected Manuscripts In Preparation: Full Manuscript Has Been Drafted

4. In preparation **Drummond Otten, C.**, Anglin, S. & Broomell, S.B. Why do People Endorse Scientifically Unsupported Medical Treatments? Evidence from Hydroxychloroquine During the COVID-19 Pandemic. Target Journal: *Thinking & Reasoning*.
 - 2023 SCOPUS CiteScore: 6.5
 - Contributions: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; visualization; writing- original draft.
3. In preparation *Hawley, C., **Drummond Otten, C.**, Iacona, G., & Gerber, L. Conservation Perspective Use and Assessment Strategies in Primate Conservation Education Programs: A Systematic Review of Peer-Reviewed Literature. Target Journal: *Conservation Biology*.
 - 2023 SCOPUS CiteScore: 12.7
 - Contributions: Conceptualization; methodology; project administration; supervision; writing- review & editing.
2. In preparation *Claborn, K., **Drummond Otten, C.**, & Janssen, M. Buzzwords in environmental conservation: Towards a shared definition and framework. Target Journal: *Environmental Science and Policy*.
 - 2023 SCOPUS CiteScore: 10.9
 - Contributions: Conceptualization; methodology; project administration; supervision; writing- review & editing.
1. In preparation *Ramey, A., **Drummond Otten, C.**, Melnick, R. Hannah, J., & Kemfert, C. Aligning Policy Goals And Metrics In Coal Region Transitions: Insights From Experts In The US and Germany. Target Journal: *Energy Research & Social Science*.
 - 2023 SCOPUS CiteScore: 14.0
 - Contributions: Conceptualization; methodology; project administration; supervision; writing- review & editing.

Research Funding

External Research Grants

1. 10/01/2023-08/31/2026 Title: DISES: Decision Making for Land Use Planning under Future Climate Scenarios through Engaged Research via Co-Design
Sponsor: National Science Foundation, Dynamics of Integrated Socio-Environmental Systems
Award Number: 2401273
Role: Co-Principal Investigator (Lead PI: Amy Frazier, UCSB; Co-PI Gwen Iacona, ASU)
Total Requested: \$1,599,825.00*
Individual Investigator Recognition: \$319,965 (20%)*

**Please note: Since the grant was awarded, lead PI Amy Frazier switched institutions from ASU to UCSB, leading to a reconfiguration of the grant budget. The funding amounts listed above reflect the budget originally submitted to NSF, prior to the lead PI's change of institutions. My FSAR currently lists both the original award budget, with the above information (under Fiscal Year 2023), as well as the reconfigured budget (under Fiscal Year 2024), which shows a total amount of \$361,447 awarded to ASU, with my individual investigator recognition of \$180,724 (50%).*

Internal Research Grants

1. 05/2021-present
Title: Lay Understanding of Scientific Institutions
Sponsor: Arizona State University Institute for Social Science Research Seed Grant
Role: Principal Investigator
Budget: \$7634

Unfunded External Grant Applications

5. 07/01/2022-06/30/2024
Title: But does it work? On the effectiveness of decision structuring to counteract politically motivated reasoning (**invited resubmission*)
Sponsor: National Science Foundation, Decision, Risk, and Management Sciences
Role: Co-Principal Investigator (Lead PI: J. Arvai, University of Southern California)
Total requested budget: \$589,576
ASU requested budget: \$49,664
4. 01/01/2022-12/31/2025
Title: Translating National Academies of Science, Engineering, and Medicine Reports into Policy and Practice
Sponsor: National Science Foundation, Science of Science: Discovery, Communication and Impact
Role: Principal Investigator
Total requested budget: \$886,641
3. 2021-2022
Title: Witnessing others “fall” for fake news may encourage more discretion online.
Sponsor: Facebook Research, Foundational Integrity Research: 2021 Misinformation and Polarization
Role: Collaborator (PI: Lauren Lutzke, PhD Student, University of Southern California)
Total requested budget: \$49,875*
ASU requested budget: \$0*
**Please note: This grant was submitted directly to Facebook Research and does not appear on my FSAR.*

2. 06/01/2021-05/31/2023 Title: But does it really work? On the effectiveness of decision structuring to counteract politically motivated reasoning. (**invited resubmission*)
Sponsor: National Science Foundation, Decision, Risk, and Management Sciences
Role: Co-Principal Investigator (Lead PI: J. Arvai, University of Southern California)
Total requested budget: \$546,166
ASU requested budget: \$47,491
1. 01/01/2021-12/31/2022 Title: But does it really work? On the effectiveness of decision structuring to counteract politically motivated reasoning.
Sponsor: National Science Foundation, Decision, Risk, and Management Sciences
Role: Co-Principal Investigator (Lead PI: J. Arvai, University of Southern California)
Total requested budget: \$537,529
ASU requested budget: \$46,497

Unfunded Internal Grant Applications

1. 2022-2023 Title: Designing a public engagement strategy to support the establishment of an effective and equitable US National Biodiversity Strategy.
Sponsor: Arizona State University Women and Philanthropy 2021-2022 Grant Program
Role: Team Member (PI: L. Gerber).
Requested budget: \$50,000.

Declined Pre-Proposals and Letters of Intent

2. Submitted April 2021 Title: Preliminary Proposal: Center for Inclusive Environmental Synthesis, Education, and Decisions
Sponsor: National Science Foundation, Center for Advancement and Synthesis of Open Environmental Data and Sciences
Role: Senior Personnel (PI: L. Gerber).
Type: Preliminary Proposal
1. 09/02/2021-01/31/2023 Title: Structuring Decisions To Counteract Politically Motivated Reasoning
Sponsor: Russell Sage Foundation, Decision Making and Human Behavior in Context
Role: Co-Principal Investigator (PI: J. Arvai, USC).
Requested budget: \$175,000.
Type: Letter of Intent

Research Grants Prior to ASU Affiliation

7. 2018 Title: Unwarranted Extrapolation in the Communication of Science News
Sponsor: Carnegie Mellon University Center for Behavioral Decision Research Small Grant
Role: Co-I (PI: S. Anglin.)
Budget: \$2450.
6. 2015-2017 Title: Doctoral Dissertation Research: Sophisticated Rejection of Scientific Evidence
Sponsor: National Science Foundation, National Center for Science and Engineering Statistics
Award Number: 1537364
Role: Student Co-PI (PI: B. Fischhoff)
Budget: \$14,999
5. 2014-2017 National Science Foundation Graduate Research Fellowship
4. 2015 Sponsor: Qualtrics Behavioral Research Grant
Budget: \$3000.
3. 2015 Sponsor: Carnegie Mellon University Graduate Student Assembly/Provost's Office Graduate Small Project Help Research Grant
Budget: \$750.
2. 2014 Sponsor: Carnegie Mellon University Graduate Student Assembly/Provost's Office Conference Funding
Budget: \$500.
1. 2013 Sponsor: Carnegie Mellon University Center for Behavioral Decision Research Small Grant
Budget: \$2500

Research Awards

Research Awards Prior to ASU Affiliation

4. 2017 Honorable Mention, Science and Society Category, Student Poster Competition, **American Association for the Advancement of Science** Annual Meeting, for *Education, Science Literacy, and Polarized Beliefs About Science*, with B. Fischhoff
3. 2016 Winner, Decision Analysis and Risk Specialty Group Student Merit Award, **Society for Risk Analysis** Annual Meeting, for *Putting on Your Thinking Cap: Priming Scientific Reasoning Produces Critical but Biased Evaluations of Scientific Evidence*, with B. Fischhoff
2. 2016 Second Place, Student Poster Competition, **Society for Judgment and Decision Making** Annual Meeting, for *Putting on Your Thinking Cap: Priming Scientific Reasoning Produces*

1. 2015 *Critical but Biased Evaluations of Scientific Evidence*, with B. Fischhoff
Second Place, Student Poster Competition, **Society for Judgment and Decision Making** Annual Meeting, for *Development and Validation of the Scientific Reasoning Scale*, with B. Fischhoff

Research Presentations

Symposia Organized for International Academic Conferences

1. 2023, December Exploring the Role of Psychological Factors in Shaping Judgments and Decisions on Societal Issues. Symposium presented at the 2023 Annual Meeting of the Society for Risk Analysis, Washington, D.C.

Refereed Conference Presentations

25. 2025, August Broomell, S., Sommer, J., Anglin, S., **Drummond Otten, C.** Reconsidering Belief Updating from a Measurement Perspective. Paper accepted for presentation at the Subjective Probability, Utility & Decision Making conference, Lucca, Italy.
24. 2025, April Frazier, A., Daldegan, G., **Drummond Otten, C.**, *Guerrero Pineda, C., Iacona, G., Krieger, J., *Maeroff, D., McManus, N., Noguera Urbano, E., Rodriguez Buriticá, S., Roehrdanz, P., Sanders, E., Song, L., Willett, D., Yang, W. The ECO-PLAN Project: Evaluating Co-Design for People, Land Use, and Nature. Presented at the annual meeting of the International Association for Landscape Ecology-North America. Raleigh, N.C.
23. 2025, March Anglin, S., Rubinstein, R., Mangracina, B., Shaw, K.M., **Drummond Otten, C.** Personality Stability and Change across the Academic Semester. Paper presented at the annual meeting of the Eastern Psychological Association, New York, NY.
22. 2024, December **Drummond Otten, C.**, Anglin, S., & Broomell, S.B. Predictors of Perceptions of Scientific Uncertainty: Science Literacy and Scientific Reasoning Ability. Paper accepted for presentation at the meeting of the Society for Risk Analysis, Austin, TX.
Withdrawn due to illness.
21. 2024, November **Drummond Otten, C.**, Anglin, S., & Broomell, S.B. Scientific Reasoning Ability and Science Literacy Amongst Undergraduate Students. Poster accepted for presentation at the meeting of the Society for Judgment and Decision-Making, New York, NY.
Withdrawn due to illness.
20. 2024, August **Drummond Otten, C.**, Anglin, S., & Broomell, S.B. Drawing Different Conclusions from the Same Evidence: Belief in

- Hydroxychloroquine During COVID-19. Paper presented at the meeting of the American Psychological Association, Seattle, Washington.
19. 2024, June Cohen, A.S., Bearth, A., & **Drummond Otten, C.** The Role of Actively Open-Minded Thinking in Civic Engagement Toward Genome Editing in Switzerland and U.S.A. Paper presented at the meeting of the Society for Risk Analysis- Europe, Athens, Greece.
 18. 2023, December Sleboda, P., Bruine de Bruin, W., **Drummond Otten, C.**, Lutzke, L., Cohen, A.S., & Árvai, J. Associations of fear and anger with risk perceptions and preventive behaviors during the COVID-19 pandemic: May and December 2020. Paper presented at the meeting of the Society for Risk Analysis, Washington, DC.
 17. 2023, December **Drummond Otten, C.**, Anglin, S. & Broomell, S.B. Do individuals selectively engage their analytical reasoning abilities? Paper presented at the meeting of the Society for Risk Analysis, Washington, DC.
 16. 2023, November **Drummond Otten, C.**, Anglin, S. & Broomell, S.B. Do individuals selectively engage their analytical reasoning abilities? Poster presented at the meeting of the Society for Judgment and Decision-Making, San Francisco, CA.
 15. 2023, June Sleboda, P., Bruine de Bruin, W., **Drummond Otten, C.**, Lutzke, L., Cohen, A.S., & Árvai, J. Associations of fear and anger with risk perceptions and preventive behaviors during the COVID-19 pandemic: May and December 2020. Paper presented at the meeting of the Society for Risk Analysis- Europe, Lund, Sweden.
 14. 2023, March Frazier, A., Roehrdanz, P., Brock, C., Iacona, G., **Drummond Otten, C.**, Sanders, E. & Yang, W. Decision Making for Land Use Planning under Future Climate Scenarios through Co-Design. Presented at the annual meeting of the International Association for Landscape Ecology-North America. Riverside, CA.
 13. 2022, December **Drummond Otten, C.**, Anglin, S., & Broomell, S. Drawing Different Conclusions from the Same Evidence: Belief in Hydroxychloroquine During the COVID-19 Pandemic. Paper presented at the meeting of the Society for Risk Analysis, Tampa, FL.
 12. 2022, December Cohen, A.S., Bearth, A., & **Drummond Otten, C.** Risk perceptions, critical thinking, and acceptance of genome editing in the United States and Switzerland. Paper presented at the meeting of the Society for Risk Analysis, Tampa, FL.
 11. 2022, November **Drummond Otten, C.**, Anglin, S., & Broomell, S. Drawing Different Conclusions from the Same Evidence: Belief in Hydroxychloroquine During the COVID-19 Pandemic. Poster

- presented at the meeting of the Society for Judgment and Decision Making, San Diego, CA.
10. 2022, February **Drummond Otten, C.,** *Cohen, A.S., *Lutzke, L., & Arvai, J. Social Norms, Individual Critical Thinking Skills, and Uptake of COVID-19 Preventative Behaviors. Poster presented at the meeting of the Society for Judgment and Decision Making, virtual.
 9. 2021, December **Drummond Otten, C.,** *Cohen, A.S., *Lutzke, L., & Arvai, J. Social Norms, Individual Critical Thinking Skills, and Uptake of COVID-19 Preventative Behaviors. Paper presented at the meeting of the Society for Risk Analysis, virtual.
 8. 2021, December *Lutzke, L., *Cohen, A.S., **Drummond Otten, C.** & Arvai, J. Perceiving political polarization within the context of COVID-19 is associated with individuals' pandemic responses and attitudes in the U.S. Paper presented at the meeting of the Society for Risk Analysis, virtual.
 7. 2021, December *Cohen, A.S., *Lutzke, L., **Drummond Otten, C.** & Arvai, J. I Think, Therefore I Act: The Influence of Critical Thinking Ability on Trust and Compliance During the COVID-19 Pandemic. Paper presented at the meeting of the Society for Risk Analysis, virtual.
 6. 2021, June *Lutzke, L., *Cohen, A.S., **Drummond Otten, C.** & Arvai, J. Perceiving political polarization within the context of COVID-19 is associated with individuals' pandemic responses and attitudes in the U.S. Paper presented at the meeting of the Society for Risk Analysis-Europe, virtual.
 5. 2021, June *Cohen, A.S., *Lutzke, L., **Drummond Otten, C.** & Arvai, J. Sex Differences in COVID-19 perception and prevention in the United States. Paper presented at the meeting of the Society for Risk Analysis-Europe, virtual.
 4. 2020, December **Drummond, C.,** *Cohen, A.S., *Lutzke, L., & Arvai, J. Reasoning about novel risks: How does scientific reasoning ability relate to behavioral and attitudinal responses to the COVID-19 pandemic? Paper presented at the meeting of the Society for Risk Analysis, virtual.
 3. 2020, December *Sen, M., *Lutzke, L., **Drummond, C.** & Arvai, J. Debating climate risk management on Twitter: The effect of explanatory depth and tone on judgments of information quality and policy support. Paper presented at the meeting of the Society for Risk Analysis, virtual.
 2. 2020, December *Cohen, A.S., *Lutzke, L., **Drummond, C.** & Arvai, J. Actively Open-Minded Thinking, Risk Perceptions, & Behavioral Adherence during the COVID-19 Pandemic in the United States. Paper presented at the meeting of the Society for Risk Analysis, virtual.

1. 2020, December **Drummond, C.**, Siegrist, M. & Arvai, J. Limited effects of exposure to fake news on climate change. Poster presented at the meeting of the Society for Judgment and Decision-Making, virtual.

Invited Academic Presentations Prior to ASU Affiliation

3. 2018 Downstream Consequences of Exposure to Climate Misinformation (with M. Siegrist and J. Arvai). Plenary presentation at the University of Michigan University-Wide Sustainability & Environment Conference, Ann Arbor MI.
2. 2017 Scientific Reasoning Ability and its Implications for Science Communication. White paper presented at the University of Michigan Conference on How We Can Improve Health Science Communication, Ann Arbor MI.
1. 2016 Scientific Reasoning and the Reception of Scientific Evidence (w. B Fischhoff). Presented to the RAND Center for Decision Making Under Uncertainty, Pittsburgh PA.

Refereed Conference Presentations Prior to ASU Affiliation

26. 2020, February Anglin, S.M., **Drummond, C.** & Downs, J. Readers Value Accuracy and Clarity in Science News, But Often Misinterpret Findings. Poster presented at the meeting of the Society for Personality and Social Psychology, New Orleans, LA
25. 2019, December **Drummond, C.**, Siegrist, M. & Arvai, J. Effects of exposure to fake news on climate change. Paper presented at the meeting of the Society for Risk Analysis, Arlington, VA.
24. 2019, December *Larkin, C.P., **Drummond, C.**, & Arvai, J. Paging Dr. Jarvis: Evaluating the acceptance of advice from an “A.I.” vs. a human expert. Paper presented at the meeting of the Society for Risk Analysis, Arlington, VA.
23. 2019, December *Gray, S., **Drummond, C.** & Arvai, J. The influence of membership on the perceived legitimacy of risk management recommendations made by the EPA’s science advisory board. Paper presented at the meeting of the Society for Risk Analysis, Arlington, VA.
22. 2019, November **Drummond, C.**, Anglin, S.M. & Broomell, S.B. Do individuals selectively engage their analytical reasoning abilities? Poster presented at the meeting of the Society for Judgment and Decision Making, Montreal, CA.
21. 2019, November Anglin, S.M., **Drummond, C.** & Downs, J. Readers Value Accuracy and Clarity in Science News, But Often Misinterpret Findings. Poster presented at the meeting of the Society for Judgment and Decision Making, Montreal, CA.

20. 2019, August **Drummond, C.**, Anglin, S.M. & Broomell, S.B. Do individuals selectively engage their analytical reasoning abilities? Poster presented at the meeting of the Subjective Probability, Utility, and Decision Making conference, Amsterdam, the Netherlands.
19. 2019, February Anglin, S.M., Broomell, S.B. & **Drummond, C.** Confirmatory vs. disconfirmatory hypothesis testing strategies. Poster presented at the meeting of the Society for Personality and Social Psychology, Portland, OR.
18. 2018, December **Drummond, C.** & Fischhoff, B. Modeling the Relationship Between Emotional Responses to and Judgments of Scientific Evidence. Paper presented at the meeting of the Society for Risk Analysis, New Orleans, LA.
17. 2018, December *Lutzke, L., **Drummond, C.**, Slovic, P. & Arvai, J. Can simple interventions help people identify fake news about climate change on Facebook? Paper presented at the meeting of the Society for Risk Analysis, New Orleans, LA.
16. 2018, November **Drummond, C.** & Fischhoff, B. Dimensionality of Lay Judgments of Scientific Research. Poster presented at the meeting of the Society for Judgment and Decision Making, New Orleans, LA.
15. 2018, November Anglin, S.M., Broomell, S.B. & **Drummond, C.** Confirmatory vs. disconfirmatory hypothesis testing strategies. Poster presented at the meeting of the Society for Judgment and Decision Making, New Orleans, LA.
14. 2018, October **Drummond, C.** & Fischhoff, B. Modeling the Relationship Between Emotional Responses to and Judgments of Scientific Evidence. Paper presented at the meeting of the Association for Consumer Research, Dallas TX.
13. 2018, February **Drummond, C.**, Argo, N. & Hebert, R. Behavioral Influences on Clinician Decision Making in End-of-Life Situations. Paper presented at the annual meeting of the Society of Behavioral Medicine, New Orleans LA.
12. 2017, November **Drummond, C.** & Fischhoff, B. Judgments of Scientific Evidence: The Role of Emotion and Scientific Reasoning Ability. Poster presented at the meeting of the Society for Judgment and Decision Making, Vancouver, BC.
11. 2017, June **Drummond, C.** & Fischhoff, B. Individuals with Greater Science Literacy and Education Have More Polarized Beliefs on Controversial Science Topics. Paper presented at the Cambridge Risk and Uncertainty Conference, Cambridge UK.
10. 2017, February **Drummond, C.** & Fischhoff, B. Education, Science Literacy, and Polarized Beliefs About Science. Poster presented at the meeting of the American Association for the Advancement of Science, Boston MA.
9. 2016, December **Drummond, C.** & Fischhoff, B. Putting on Your Thinking Cap: Priming Scientific Reasoning Produces Critical but Biased

8. 2016, November Evaluations of Scientific Evidence. Poster presented at the meeting of the Society for Risk Analysis, San Diego CA.
Drummond, C. & Fischhoff, B. Putting on Your Thinking Cap: Priming Scientific Reasoning Produces Critical but Biased Evaluations of Scientific Evidence. Poster presented at the meeting of the Society for Judgment and Decision Making, Boston MA.
7. 2016, November **Drummond, C. & Fischhoff, B. Putting on Your Thinking Cap: Priming Scientific Reasoning Produces Critical but Biased Evaluations of Scientific Evidence.** Datablitz talk presented at the Society for Judgment and Decision Making Preconference on Debiasing Decision Makers, Questrom School of Business, Boston MA.
6. 2016, August **Drummond, C. & Fischhoff, B. Development and Validation of the Scientific Reasoning Scale.** Paper presented at the International Conference on Thinking, Providence RI.
5. 2016, May **Drummond, C. & Fischhoff, B. Predicting Public Reception of Scientific Evidence with the Scientific Reasoning Scale.** Poster presented at the annual meeting of the American Association for Public Opinion Research, Austin TX.
4. 2015, November **Drummond, C. & Fischhoff, B. Development and Validation of the Scientific Reasoning Scale.** Poster presented at the meeting of the Society for Judgment and Decision Making, Chicago IL.
3. 2015, August **Drummond, C. & Fischhoff, B. Development and Validation of the Scientific Reasoning Scale.** Paper presented at the Subjective Probability, Utility and Decision Making Conference, Budapest, Hungary.
2. 2015, August **Drummond, C. & Fischhoff, B. Predicting the Reception of Scientific Evidence: The Role of Scientific Reasoning Ability.** Poster presented at the Subjective Probability, Utility and Decision Making Conference, Budapest, Hungary.
1. 2014, November **Drummond, C. & Fischhoff, B. A New Perspective on Scientific Literacy: Introducing the Scientific Reasoning Scale.** Poster presented at the meeting of the Society for Judgment and Decision Making, Long Beach CA.

SECTION 2. INSTRUCTION

Instruction Summary

New Courses Developed at ASU: Undergraduate Courses: 1, both in-person and online. Graduate courses: 1, in-person.

Current PhD Supervision: Chair: 1 student. Committee Member: 2 students.

PhD Students Graduated: Co-Chair: 2 students. Committee Member: 2 students. External Committee Member: 2 students.

Master's Students Graduated: Committee Member: 1 student.

Undergraduate Honors Theses Supervised: Committee Member: 2 students.

Teaching Experience at Arizona State University

Arizona State University, School of Human Evolution and Social Change

Undergraduate Courses

ASB 230: Beginning Social Research. *Online*. Fall 2024 A

ASB 230: Beginning Social Research. *In person*. Fall 2021; Fall 2022; Spring 2023; Fall 2023; Spring 2024

Graduate Courses

ASB 500: Research Design for Social and Behavioral Sciences. *In person*. Spring 2021; Spring 2022; Spring 2023

Teaching Experience Prior to ASU Affiliation

University of Michigan, School for Environment and Sustainability

Graduate Courses

EAS 501: Science Communication for Sustainability. *In person*. Fall 2019

Courses Developed at Arizona State University

Arizona State University, School of Human Evolution and Social Change

Undergraduate Courses

ASB 230: Beginning Social Research. *In person*.
ASB 230: Beginning Social Research. *Online*.

Graduate Courses

ASB 500: Research Design for Social and Behavioral Sciences. *In person*.

Courses Developed Prior to ASU Affiliation

University of Michigan, School for Environment and Sustainability

Graduate Courses

EAS 501: Science Communication for Sustainability. *In person*

Teaching Awards at Arizona State University

Excellence in Graduate Teaching Award, School of Human Evolution and Social Change, Arizona State University Spring 2023

Teaching Training and Certifications at Arizona State University

ACUE Micro-credential in Creating an Inclusive and Supportive Learning Environment	Spring 2023
Arizona State University Master Class for Teaching Online	Fall 2020; Spring 2024

Student Supervision at Arizona State University

Current Student Supervision

Doctoral Students

Committee Chair:

1. Dalia Maeroff. PhD in Environmental Social Science from the Arizona State University School of Human Evolution and Social Change. Current Status: Pre-Dissertation Proposal Defense.

Committee Member:

1. Md. Hasibul Hasan. PhD in Environmental Social Science from the Arizona State University School of Human Evolution and Social Change. Current Status: Pre-Dissertation Proposal Defense.
2. Alexandra Ptacek. PhD in Anthropology from the Arizona State University School of Human Evolution and Social Change. Current Status: Pre-Dissertation Proposal Defense.

Completed Student Supervision

Doctoral Students

Co-Chair:

1. Caitlin Hawley. PhD in Environmental Social Science from the Arizona State University School of Human Evolution and Social Change. Graduated May 2025.
2. Kelly Claborn. PhD in Environmental Social Science from the Arizona State University School of Human Evolution and Social Change. Graduated May 2024.
 - a. Major Accomplishments: Kelly received a Doctoral Dissertation Research Improvement Grant from the National Science Foundation Decision, Risk and Management Sciences solicitation (Award #2214346; Title: DDRIG in DRMS: Exploring the Spread, Use, and Impact of Imprecise Language on Decision Making; \$24,888.00; PI: Marco Janssen; 10/01/22 to 04/30/24).

Committee Member:

1. Rachel Gilchrist. PhD in Psychology from the Arizona State University Department of Psychology. Graduated August 2024.

2. Eve Castille. PhD in Sustainability from the Arizona State University School of Sustainability. Graduated December 2023.

External Committee Member for PhD Students at Other Universities:

1. Lauren Lutzke. PhD in Social Psychology from the University of Southern California. Graduated 2022.
 - a. Major Accomplishments: Lauren is now the Kleinman Center for Energy Policy Post-Doctoral Research Fellow at the Penn Center for Science, Sustainability, and the Media at the University of Pennsylvania.
2. Alex Segrè Cohen. PhD in Social Psychology from the University of Southern California. Graduated 2022.
 - a. Major Accomplishments: Alex is now an Assistant Professor of Science and Risk Communication at the University of Oregon School of Journalism and Communication.
3. Sherry Ann Ram. PhD from the University of Toronto Department of Civil and Mineral Engineering. External committee member from 2021-2022 before stepping off the committee due to a shift in Sherry's research area.

Master's Students

ASU Committee Member:

1. Alexandra Ramey. M.S. in Global Sustainability Science. Graduated May 2022.

Undergraduate Honors Thesis Students:

ASU Committee Member:

1. Madeleine Oricchio. B.S. in Anthropology. Graduated Spring 2023.
 - a. Major Accomplishments: Madeleine was selected as a Spring 2023 Dean's Medalist.
2. Jordan Haagen. B.S. in Anthropology; B.A. in Digital Culture. Graduated Spring 2022.
 - a. Major Accomplishments: Jordan's Honors Thesis won the Mensch Prize for Humanities for ASU Barrett Honors Students.

Undergraduate Barrett Honors Contract Students

1. Roberts, Christopher. ASB 230: Beginning Social Research. Spring 2023.

Undergraduate Research Apprentices (Semesters Employed in Parentheses)

1. Samuel Kniery (Fall 2022; Spring 2023)
2. Miles Mcanulty (Spring 2022; Spring 2023)
3. Alma Ruiz (Spring 2021)
4. Daanish Tung (Spring 2021)

High School Students

1. Denley Kofoed. Columbine High School. AP Research Project Consultant for Denley's AP Research project. 2021-2022.

Student Supervision Prior to ASU Affiliation

University of Michigan

Master's Students

Committee Member:

1. Sanghamitra Sen. Dual-track M.S. in Environmental Policy and Planning and Behavior, Education and Communication from the University of Michigan School for Environment and Sustainability. Graduated 2021. Mia's Master's Thesis was published in the *Journal of Risk Research* (citation above).
2. Connor Larkin. M.B.A./M.S. from the University of Michigan Erb Institute. Graduated 2020. Connor's Master's Thesis was published in the *Journal of Risk Research* (citation above).
3. Lauren Lutzke. M.S. in Behavior, Education, and Communication from the University of Michigan School for Environment and Sustainability. Graduated 2019. Lauren's Master's Thesis was published in *Global Environmental Change* (citation above).

Undergraduate and Graduate Research Assistants

1. Hanna Droessler (University of Michigan)
2. Sarah Bellaire (University of Michigan)

Carnegie Mellon University

Undergraduate Research Assistants

1. Jessica Chang (Carnegie Mellon University)
3. Timothy Kusama (Carnegie Mellon University)
4. Sasha (Kerbel) Cohen Ioannides (Carnegie Mellon University)
5. Lauren Montgomery (Carnegie Mellon University)
6. Ke Ning (Carnegie Mellon University)
7. Mark Saporta (Carnegie Mellon University)
8. Crystal Song (Carnegie Mellon University)
9. Tiffany Tse (Carnegie Mellon University)
10. John Verser (Carnegie Mellon University)

SECTION 3. SERVICE

Service to the School of Human Evolution and Social Change

Fall 2023-present	Approach Convener, Environmental Social Science, School of Human Evolution and Social Change, Arizona State University
Spring 2024-Spring 2025	Search Committee Member, Assistant Clinical Professor, Director of Charter and Community Initiatives, School of Human Evolution and Social Change, Arizona State University (Stepped off due to FMLA leave)

Fall 2023	Search Committee Member, Target Hire Search Committee, Environmental Social Science, School of Human Evolution and Social Change, Arizona State University (Candidate Withdrew)
Fall 2020-Spring 2024	Personnel Committee Member, School of Human Evolution and Social Change, Arizona State University
Fall 2022-Spring 2023	Search Committee Member, Director of the School of Human Evolution and Social Change, Arizona State University

Professional Service

Ad Hoc Reviewer

Peer-Reviewed Journals:

2024	Applied Cognitive Psychology; Harvard Kennedy School Misinformation Review; Journal of Behavioral Decision Making; Journal of Experimental Psychology: Applied; Psychological Inquiry; Risk Analysis; Thinking & Reasoning
2023	Journal of Behavioral Decision Making; Journal of Experimental Psychology: General; Public Understanding of Science; Science Communication
2022	Applied Cognitive Psychology; Harvard Kennedy School Misinformation Review; Personality and Social Psychology Bulletin; Risk Analysis
2021	Applied Cognitive Psychology; Environmental Communication; International Journal of Public Opinion Research; Journal of Behavioral Decision Making; Journal of Experimental Psychology: Applied; Public Understanding of Science; Risk Analysis; Science Communication; Sociology of Religion
2020	Applied Cognitive Psychology; Behavior Research Methods; Climatic Change; International Journal of Public Opinion Research; Journal of Cognitive Psychology; Psychonomic Bulletin & Review; Risk Analysis; Social Science Computer Review

Grantmakers:

1. Ad hoc reviewer for the United States National Science Foundation Decision, Risk and Management Sciences solicitation (1 grant each in Fall 2022; Spring 2023; Spring 2024)
2. Ad hoc reviewer for the Social Sciences and Humanities Research Council of Canada (1 grant in Spring 2022)

Academic Presses:

Johns Hopkins University Press (1 book in Fall 2020)

Conferences:

Society for Judgment and Decision Making Annual Meeting Student Poster Competition Poster Judge (February 2022; November 2022; November 2023; November 2024)

Ad Hoc Reviewer Service Prior to ASU Affiliation

Peer-Reviewed Journals:

Applied Cognitive Psychology; Climatic Change; Environmental Research Letters; International Journal of Public Opinion Research; Public Understanding of Science; Risk Analysis; Journal of Experimental Psychology: Applied; Journal of Behavioral Decision Making; International Journal of Psychology; Nature Communications; Public Opinion Quarterly; Public Understanding of Science; Risk Analysis; Social Forces

Grantmakers:

Israeli Science Foundation (Spring 2020)

Current Membership in Professional Societies

Society for Judgment and Decision Making; Society for Risk Analysis

Media and Outreach

- | | |
|------|--|
| 2024 | Profiled by the ASU Swette Center for Sustainable Food Systems: <i>Meet affiliated faculty Caitlin Otten</i> . https://globalfutures.asu.edu/food/news/story/meet-affiliated-faculty-caitlin-otten/ |
| 2024 | Interviewed by ASU News: <i>ASU scientist studies how bans, regulations on food technology affect consumer acceptance, perceptions</i> . https://news.asu.edu/20240412-environment-and-sustainability-asu-scientist-studies-how-bans-regulations-food-technology |
| 2021 | Invited panelist for <i>The Social Side of Sustainability</i> , a webinar in the USC Wrigley Institute for Environmental Studies Webinar Series. Spring 2021. |
| 2020 | Presenter for <i>What motivates firm-level climate action? Individual and situational factors</i> in, “ASU Presents; The role of business in facilitating cross-scale collective action on climate.” United Nations Global Compact Virtual Forum. Fall 2020, remote. https://www.youtube.com/watch?v=5Mm-dqj23-A&list=PL315PYhQ4900nYnMRzeId5qjfHC1cTwLV&index=12 |

Prior to ASU Affiliation

- | | |
|------|---|
| 2018 | <i>Individuals with greater science literacy and education have more polarized beliefs on controversial science topics (w. B Fischhoff)</i> . Presentation to the New York State Environmental Protection Bureau, remote. |
| 2017 | <i>Lay Understanding of and Attitudes Toward Controversial Science</i> . Presentation to the Dow Chemical Company, Midland MI. |
| 2015 | <i>Science Communication Fellow</i> . Phipps Conservatory and Botanical Gardens, Pittsburgh PA. |