

Dr. BRIONY SWIRE-THOMPSON
Senior Research Scientist

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CV updated: 30/11/2021

Research Interests

My program of research is focused on what drives belief in misinformation, why certain individuals are predisposed to refrain from belief change even in the face of good corrective evidence, and how corrections can be designed to maximize impact. I conduct my research primarily from a cognitive psychology perspective, but also take inspiration from social psychology, health psychology, political psychology, and communications.

Education and Training

- Ph.D. in Psychological Science, University of Western Australia Feb 2013 - Dec 2017
Cognitive Science Laboratories
Dissertation title: The Role of Memory and Ideological Biases in the Correction of Misinformation
Supervisors: Associate Professor Ullrich Ecker, Professor Stephan Lewandowsky
- Honours¹ in Psychological Science, University of Western Australia Feb 2009 - Dec 2009
Cognitive Science Laboratories
Thesis: Misinformation in Memory: Strength of Encoding and Retracting Information
Supervisors: Professor Stephan Lewandowsky, Associate Professor Ullrich Ecker
- Bachelor of Arts, University of Western Australia Feb 2003 - Dec 2005
Double major in Psychological Science, single major in English Literature

Positions and appointments (*academic related only*)

- Senior Research Scientist Jul 2020–present
Northeastern University, Network Science Institute, Boston
Other appointment: Harvard Institute for Quantitative Social Sciences, Cambridge
- Associate Research Scientist Aug 2019–Jul 2020
Northeastern University, Network Science Institute, Boston
Other appointment: Harvard Institute for Quantitative Social Sciences, Cambridge
- Postdoctoral fellow Aug 2017- Aug 2019
Northeastern University, Network Science Institute, Boston
Other appointment: Harvard Institute for Quantitative Social Sciences, Cambridge
Supervisor: Professor David Lazer

Honors and Awards

- Dean's List Honourable Mention—Recognition of an Outstanding Thesis 2017
Project: The role of memory and ideological biases in the correction of misinformation
From: University of Western Australia

¹ In Australia, honours is a one year course with a substantial research component. It is completed after a bachelor's degree and is a prerequisite for postgraduate studies.

- Fulbright Scholarship to Massachusetts Institute of Technology 2015 - 2016
 From: Fulbright Australia
 Host supervisor: Professor Adam Berinsky, Political Experiments Research Laboratory
- Study Abroad Scholarship to the University of Bristol 2004 - 2005
 From: The University of Western Australia

Peer-reviewed Publications

Swire-Thompson, B., Miklaucic, N., Wihbey, J., Lazer, D., & DeGutis, J. (in press). Backfire effects after correcting misinformation are strongly associated with reliability. *Journal of Experimental Psychology: General*.

Swire-Thompson, B., Cook, J., Butler, L., Sanderson, J., Lewandowsky, S., & Ecker, U.K.H. (in press). Correction format has a limited role when debunking misinformation. *Cognitive Research: Principles and Implications*.

Swire-Thompson, B. & Lazer, D. (in press). Reducing Health Misinformation in Science: A Call to Arms. *The ANNALS of the American Academy of Political and Social Science*.

Peterson, J., Wilson, T., Gruhl, J. D., Davis, S., Olsen, J., Parsons, M. W., Kann, B.H., Watt, M., **Swire-Thompson, B.**, & Johnson, S. B. (2021). The Association Between Conventional Cancer Treatment History and Dissatisfaction Among Those Seeking Alternative Cancer Therapies: Insights From a Crowdfunding Platform. *International Journal of Radiation Oncology, Biology, Physics*, 111(3), e344-e345.

Johnson, S. B., Parsons M., Dorff, T., Moran, M.S. Ward, J.H., Cohen, S.A., Akerley, W., Bauman, J., Hubbard, J., Spratt, D.E., Bylund, C.L., **Swire-Thompson, B.**, Onega, T., Scherer, L.D., Tward, J., Fagerlin A. (in press). Cancer Misinformation and Harmful Information on Facebook and Other Social Media: A Brief Report. *JNCI: Journal of the National Cancer Institute*.

Swire-Thompson, B. DeGutis, J., & Lazer, D. (2020). Searching for the backfire effect: Measurement and design considerations. *Journal of Applied Research in Memory and Cognition*, 9(3), 286-299.

Swire-Thompson, B. & Lazer, D. (2020). Public health and online misinformation—Challenges and recommendations. *Annual Review of Public Health*, 41, 433-451.

Pasquetto, I., **Swire-Thompson, B.**, Amazeen, M.A., Benevenuto, F., Brashier, N.M., Bond, R.M., Bozarth, L.C., Budak, C., Ecker, U.K.H., Fazio, L.K., Ferrara, E., Flanagan, A.J., Flammini, A., Freelon, D., Grinberg, N., Hertwig, R., Jamieson, K.H., Joseph, K., Jones, J.J. ... Yang, K.C. (2020). Tackling misinformation: What researchers could do with social media data. *Harvard Kennedy School (HKS) Misinformation Review*, 1(8)

Peterson, J.S., **Swire-Thompson, B.** & Johnson, S.B. (2020). What's the alternative? Responding strategically to cancer misinformation, *Future Oncology*, 1883-1888.

Swire-Thompson, B., Ecker, U. K.H., Swire, B., Lewandowsky, S., & Berinsky, A. J. (2020). They might be a liar but they're my liar: Source evaluation and the prevalence of misinformation. *Political Psychology*, 41(1), 21-34.

Joseph, K., **Swire-Thompson, B.**, Baum, M., & Lazer D. (2019). Polarized, together: Comparing partisan support for Trump's tweets using survey and platform-based measures. *International AAAI Conference on Web and Social Media*, Vol. 13, pp. 290-301

Grinberg, N., Joseph, K., Friedland, L, **Swire-Thompson, B.**, & Lazer, L. (2019) Voter exposure to fake news on Twitter during the 2016 U.S. election, *Science*, 363(6425), 374-378.

Swire, B. & Ecker, U. K. H. (2018). Misinformation and its correction: Cognitive mechanisms and recommendations for mass communication. In B. Southwell, E. A. Thorson, & L. Sheble. (Eds), *Misinformation and Mass Audiences*. Austin, TX: University of Texas Press, 195-221.

Aird, M., Ecker, U. K. H., **Swire, B.** Berinsky, A., J., Lewandowsky, S. (2018) Does truth matter to voters? The effects of correcting political misinformation in an Australian sample, *Royal Society Open Science*, 5(12), 180593.

Swire, B., Ecker, U. K. H. & Lewandowsky, S. (2017). The role of familiarity in correcting inaccurate information, *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 43 (12), 1948-1961.

Swire, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2017). Processing political misinformation—Comprehending the Trump phenomenon, *Royal Society Open Science*, 4(3), 160802.

Ecker, U. K. H., **Swire, B.**, & Lewandowsky, S. (2014). Correcting misinformation—A challenge for education and cognitive science. In D. N. Rapp & J. Braasch. (Eds.), *Processing Inaccurate Information: Theoretical and Applied Perspectives from Cognitive Science and the Educational Sciences*. (pp. 13-38). Cambridge, MA: MIT Press.

Ecker, U. K. H., Lewandowsky, S., **Swire, B.**, & Chang, D. (2011). Correcting false information in memory: Manipulating the strength of misinformation encoding and its retraction. *Psychonomic Bulletin and Review*, 18, 570-578.

Working Papers

Swire-Thompson, B., Dobbs, M., Thomas, A., & DeGutis, J. (*under review at PNAS*). Memory failure predicts belief regression after the correction of misinformation.

Beauchamp, N., **Swire-Thompson, B.**, Shugars, S., & Lazer, D. (*under review at Decision*). Wisdom over madness: How the resilience of experts to social information improves collective intelligence.

Morrow, G., **Swire-Thompson, B.**, Polny, J., Kopec, M., & Wihbey, J. (*under review at JASIST*). The emerging science of content labeling: Contextualizing social media content moderation.

Sanderson, J., Bowden, V., **Swire-Thompson, B.**, Lewandowsky, S., Ecker, U.K.H. (*under review at JARMAC*). Correcting auditory misinformation: Manipulating cognitive load and misinformation familiarity

Ecker, U.K.H., Sharkey, C.X.M., & **Swire-Thompson, B.** (*in prep*). No familiarity backfire effect when correcting vaccine misinformation: Failure to replicate the failure of three pro-vaccination strategies.

Competitive Funding Awarded

Pathway to Independence: K99/R00 2021-2026

Role: PI

Project: Cancer misinformation on social media and its correction

Funder: National Institute of Health: National Cancer Institute

Amount: \$1,056,885

Volkswagen Foundation Award 2019-2023

Role: Co-PI (PIs: Ralph Hertwig, Stephan Lewandowsky, Tina Eliassi-Rad, Stefan Herzog, & Awais Rashid).

Project: Controlling the Jekyll and Hyde of Artificial-Intelligence Assisted Information

Architectures: Accepting Customization while Resisting micro-targeted Manipulation.

Funder: Volkswagen Foundation

Amount: €148,000

NULab Seedling Grant 2019

Role: PI

Project: Backfire effects after the correction of misinformation

Funder: NULab for Texts, Maps, and Networks

Amount: \$1,100

NULab Seedling Grant Role: PI Project: The prevalence of backfire effects after the correction of misinformation NULab for Texts, Maps, and Networks Amount: \$2,000	2018
Gregory Schwartz Fulbright Enrichment Travel Grant Project: To present “Processing political misinformation” at a conference. Funder: Australian-American Fulbright Association Amount: \$1,200	2016
Fulbright Postgraduate Scholarship Project: The correction of misinformation Funder: Australian-American Fulbright Association Amount: \$30,000	2015-2016
Study Abroad Undergraduate Scholarship Funder: University of Western Australia Amount: \$2,500	2004-2005

Invited Talks

Swire-Thompson, B. (2021). Gaps in empirical data related to misinformation. *Symposium on health and medial misinformation: The American Public Health Association*, virtual talk.

Swire-Thompson, B. (2021). Combatting misinformation in health and health care: *DIA Global Annual Meeting*, virtual talk.

Swire-Thompson, B. (2020). Addressing health misinformation through health literacy practices. *National Academy of Sciences*, virtual talk.

Swire-Thompson, B. (2019). Public health and online misinformation: Challenges and recommendations. *Harvard T.H. Chan School of Public Health Alumni Weekend*, Boston, in-person talk.

Swire-Thompson, B. (2019). Correcting misinformation and the backfire effect. *Social Psychology Area Meeting, Cognitive Brain Sciences Colloquium*, Boston, in-person talk.

Swire-Thompson, B. (2019). Fake news, misinformation, and the 2016 election. *Tufts University, Cognitive Brain Sciences Colloquium*, Boston, in-person talk.

Swire-Thompson, B. (2018). Cognitive approaches to the correction of misinformation. *Fulbright Finland*, Finland, in-person talk.

Swire-Thompson, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2017). Belief updating and the 2016 presidential election. *University College London’s Affective Brain Lab*, Boston, in-person talk.

Swire-Thompson, B. (2017). What does cognitive psychology recommend for correcting misinformation? *Fact 4: Global Fact Checking Conference*, Madrid, in-person talk.

Swire-Thompson, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2016). Processing political misinformation, *Impact Hub*, Boston, in-person talk.

Swire-Thompson, B. (2016). Australian-American Postgraduate Fulbright Scholarships. *Fulbright Australia University of Western Australia*, Perth, in-person talk.

National and International Advisory Meetings

Swire-Thompson, B. (2020). Correcting health misinformation. *National Academy of Sciences*, Washington DC.

Swire-Thompson, B. (2018). The correction of misinformation. *NATO StratCom*, Latvia.

Swire-Thompson, B. (2018). The psychology of misinformation. *Nordic government officials meeting*, Finland.

Swire-Thompson, B. (2017). Measuring misinformation using social media and cognitive approaches to its correction. *US Advisory Council*, Boston.

Conference Presentations: Talks

Swire-Thompson, B. (2021). Memory and belief in the correction of misinformation. *Workshop on online interventions 2021 (WOI2021)*, virtual talk.

Swire-Thompson, B. & DeGutis, J. (2019). The prevalence of backfire effects after the correction of misinformation. *Society for Applied Memory and Cognition (SARAC)*, Cape Cod, in-person talk.

Swire-Thompson, B., Beauchamp, N., & Lazer, D. (2018). Anchoring and the forecasting of geopolitical events. *CompleNet*, Boston, in-person talk.

Swire-Thompson, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2017). Source evaluation after disproportionate presentations of misinformation and factual information. *Psychonomic Society Conference*, Vancouver, in-person poster.

Swire-Thompson, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2016). Correcting political misinformation. Massachusetts, Institute of Technology. *Graduate Student Seminar*, Boston, in-person talk.

Swire-Thompson, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2016). Processing political misinformation—Comprehending the Trump phenomenon. *Midwest Political Science Conference Junior Scholar Symposium*, Chicago, in-person talk.

Swire-Thompson, B., Ecker, U. K. H. & Lewandowsky, S. (2015). Correcting misinformation and the familiarity backfire effect. *University of Western Australia School of Psychology Colloquium*, Perth, in-person talk.

Swire-Thompson, B., Ecker, U. K. H. & Lewandowsky, S. (2015). Misinformation in memory. *Massachusetts Institute of Technology Graduate Student Seminar*, Boston, in-person talk.

Swire-Thompson, B., Ecker, U. K. H. & Lewandowsky, S. (2015). Correcting misinformation and the familiarity backfire effect. *Australasian Experimental Psychology Conference*, Sydney, in-person talk.

Conference Presentations: Posters

Swire-Thompson, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2016). Processing political misinformation: Comprehending the Trump phenomenon. *Psychonomic Society Conference*, Boston, in-person poster.

Swire-Thompson, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2015). Misinformation and backfire effects. Massachusetts Fulbright Seminar, Boston, in-person poster.

Swire-Thompson, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2015). The correction of misinformation. *Western Australian Fulbright Seminar*, Perth, in-person poster.

Swire-Thompson, B., Berinsky, A., J., Lewandowsky, S., & Ecker, U. K. H. (2015). Political misinformation and its correction. *Australian-American National Fulbright Seminar*, Perth, in-person poster.

Teaching

- Coordinating Graduate Research Instructor for Cognitive Psychology Feb - Jun 2015
 University: The University of Western Australia
 Responsibilities: I helped the unit coordinator, Dr. Ullrich Ecker, run the Cognitive Psychology unit of 550 students. I taught 10 graduate student instructors what content to teach and how to conduct activities for the laboratories. I assisted with the creation of laboratory content, managed the course website, and prepared individualized content for students with special needs.
- Graduate Student Instructor for Cognitive Psychology Feb - Jun 2013, Feb - Jun 2015
 University: The University of Western Australia
 Responsibilities: My role involved teaching laboratories of up to 40 students and marking assignments and exams. This second and third-year undergraduate course covered attention, executive functioning, principles and dissociations of human memory, information updating, problem solving and reasoning, judgement and decision making, applied cognition including forensic analysis, eyewitness testimony, and human error.
- Sessional Academic for Introduction to Psychology Feb - Jun 2013, Feb - Jun 2014
 University: Curtin University
 Responsibilities: My role involved teaching laboratories of up to 40 students and marking assignments, oral presentations, and exams. This first-year undergraduate course was an introduction to social psychology, personality, development, learning, memory, motivation, and the methodological issues related to psychology.
- Graduate Student Instructor for Research Methods: Design and Analysis Feb – Jun 2014
 University: The University of Western Australia
 Responsibilities: My role involved teaching laboratories of up to 40 students, demonstrating SPSS, and marking assignments and exams. This third-year undergraduate course covered performing and interpreting statistical analyses. The laboratories involved analyzing sets of data, writing reports of analyses, and evaluating research design.
- Sessional Academic for Brain and Behavior Jun – Nov 2013
 University: Curtin University
 Responsibilities: My role involved teaching laboratories of up to 40 students and marking assignments and exams. This first-year undergraduate course covered the structural and functional organization of the central nervous system, and the interrelationships between physiological functioning and behavior.

Service

- Special Issue Journal Editor (with Sander van der Linden and Jon Roozenbeek) 2022
 Journal: Applied Cognitive Psychology
 Title: The Truth is Out There: The Psychology of Conspiracy Theories and How to Counter Them
- Dissertation Committee 2021
 PhD candidate: Sacha Altay
 University: Paris Sciences et Lettres University
 Dissertation title: Understanding misinformation and fighting for information
- Advisory Committee for Fact-checking Organizations 2019-2020
 Fact-checkers: Full Fact, Chequeado, Africa Check
 Responsibilities: Providing recommendations and oversee the quality of research with regards to study design, methods, and analyses. Giving feedback on reports and publications.
- Grant reviewer 2020
 Agence Nationale de la Recherche (National Agency of Research: France)
- Book proposal reviewer 2020
 Cambridge University Press

Ad Hoc Journal Reviewer

Nature Human Behaviour; Science Advances; Proceedings of the National Academy of Sciences; Journal of Experimental Psychology: General; Journal of Applied Research in Memory and Cognition; Cognitive Research: Principles and Implications; Journal of Experimental Psychology: Learning, Memory and Cognition; American Journal of Public Health; Cognition; Journal of Experimental Psychology: Applied; Political Communication; Political Psychology.

Media Examples

How to detect, resist and counter the flood of fake news (2021) *Science News*,
<https://www.sciencenews.org/article/fake-news-misinformation-covid-vaccines-conspiracy>

The pernicious contagion of misinformation (2020) *Knowable Magazine*
<https://knowablemagazine.org/article/society/2020/pernicious-contagion-misinformation>

What is the internet doing to Boomers' brains? (2020). *Huffpost*. https://www.huffpost.com/entry/internet-baby-boomers-misinformation-social-media_n_5f998039c5b6a4a2dc813d3d

After experts criticized its approach, Facebook overhauls its Covid-19 misinformation policy. (2020). *STAT News*.
<https://www.statnews.com/2020/12/16/facebook-misinformation-covid19-update/>

Fake news is more likely to be shared by older people — but we don't know why (2019). *ABC News*.
<https://www.abc.net.au/news/science/2019-01-25/older-people-share-more-social-media-fake-news-2016-election/10746348>

Tired of being manipulated by fake news? This Northeastern researcher is creating the tools we need to fight against it. (2018). *News@Northeastern*. <https://news.northeastern.edu/2018/06/18/tired-of-being-manipulated-by-fake-news-this-northeastern-researcher-is-creating-the-tools-we-need-to-fight-against-it/>

These academics are on the research frontlines of fake news research. (2018). *Poynter*.
<https://www.poynter.org/news/these-academics-are-frontlines-fake-news-research>

The power of perception. (2017). *MIT News*. <https://news.mit.edu/2017/information-sources-affect-voters-0228>

Why we lie: The science behind our deceptive ways (2017). *National Geographic*.
<https://www.nationalgeographic.com/magazine/2017/06/lying-hoax-fibs-science/>

There's probably nothing that will change Clinton or Trump supporters' minds. (2016). *FiveThirtyEight*.
<http://fivethirtyeight.com/features/theres-probably-nothing-that-will-change-clinton-or-trump-supporters-minds/>

If fake news wasn't on Facebook, people would find it somewhere else. (2016) *The Washington Post*.
<https://www.washingtonpost.com/posteverything/wp/2016/11/19/if-fake-news-wasnt-on-facebook-people-would-find-it-somewhere-else/>