# **Emily Leahy Howell**

Hamburg, Germany & Missoula, Montana, USA

## BACKGROUND

Interdisciplinary social scientist with expertise in communication research, history of science, and science and environmental policy. I focus on facilitating science communication and democratic deliberation –connecting diverse viewpoints on complex and controversial issues to build better societal structures and solutions

## **EDUCATION**

University of Wisconsin-Madison	2016-2019
Ph.D. Nelson Institute for Environmental Studies Interdisciplinary degree, focused on science and risk communication	
Science, Media, and the Public Research Group (https://scimep.wisc.edu/)	
Minor in Life Sciences Communication	
University of Wisconsin-Madison	2014-2016
Master of Science in Environment & Resources	
Certificate in Energy Analysis and Policy	
Harvard University	2009-2013
Bachelor of Arts in History of Science Focus on power and equity in access to science and societal decision-making	
Minor in Earth and Planetary Sciences, with a focus on geology field- and coursework	
Additional coursework in history, environmental studies, and literature at: Albert-Ludwigs-Universität Freiburg, Freiburg, Germany Universität Basel, Basel, Switzerland	

## **RESEARCH**

## Social Scientist - Building Research & Evaluation into Filmmaking

Science Communication Lab, Berkeley, CA, USA

- Integrating communication research into film production to experiment with ways of better communicating complex science and social issues with diverse audiences in formal and informal education settings.
- Developing and implementing surveys and experiments to connect features of science communication and storytelling through film to convey technical information alongside the "human dimensions," values, and uncertainty associated with science-related issues.
- Wrote and conducting research for a successful grant proposal funded by the Moore Foundation to integrate social science into documentary filmmaking from pre- to post-production.
- Managing the research arm of a National Science Foundation-funded project designing and implementing research and evaluation of short films for public and student audiences.

2022-present

## Civic Science Fellows Learning Program Collaborator

- Informing and advancing future iterations of the Civic Science Fellows Program, to support crosscutting, inclusive collaborations and democratic decision-making across science and civic life. <u>https://civicsciencefellows.org/</u>
- Creating and iterating on replicable processes and more widely accessible content to create a sustainable and effective learning program in civic science, developing and building on the "pillars" of civic science: Understanding science in context; Designing for equity and inclusion; Scaffolding for impact; Communicating for the future; and Leader for systems change.

#### Researcher I & Civic Science Fellows Program Learning Coordinator

UW-Madison Life Sciences Communication Department, Madison, WI, USA

- Strengthened and expanded the Civic Science Fellows Program, to support cross-cutting, inclusive collaborations and democratic decision-making across science and civic life. <u>https://civicsciencefellows.org/</u>
- Created the civic science learning program, covering interdisciplinary, evidence-based approaches to advancing equitable, replicable, and systems-focused research and practice for fellows and program partners from diverse fields and sectors.
- Work includes initiating and managing collaborations across partners in philanthropy, academia, journalism, and policymaking, among other sectors, to connect research and practice and build networks that enable organizational and cultural shifts.
- Funded by the Science in Society Funders Collaborative, and working closely with the Rita Allen Foundation.

## **Civic Science Postdoctoral Fellow**

UW-Madison Life Sciences Communication Department, Madison, WI, USA

- Developed and supported the interdisciplinary Civic Science Fellows Program through its launch and inaugural cohort of fellows.
- Funded by the Rita Allen Foundation and Gordon & Betty Moore Foundation, in collaboration with the Kavli Foundation, the Burroughs Wellcome Fund, the Chan Zuckerberg Initiative, and the David and Lucile Packard Foundation.

## Collaborator - New Models for Communicating Science Through Film

UW-Madison Life Sciences Communication Department, Madison, WI, USA

- Wrote successful National Science Foundation grant proposal for "Collaborative Research: A new model for producing science documentaries: Building collaborations between scientists and storytellers to test methods of communication in film" (Award # AISL-2006010; PIs: Sarah Goodwin & Dietram Scheufele), \$500,000, in partnership with film producers at the Wonder Collaborative. https://wondercollaborative.org/
- Integrating communication research into film production to experiment with ways of better communicating complex science and social issues with diverse audiences.

## Consultant – Community Science Initiative

Association of Science and Technology Centers (ASTC), Washington, D.C., USA

2021-2023

2020-2022

2019-2021

- Producing synthesis of community science and its attributes and potential outcomes, for the ASTC Community Science Initiative landscape report. https://www.astc.org/impact-initiatives/astcscommunity-science-initiative/
- Results focus on how communities, particularly those underserved and underrepresented in science, can conduct research informed by community experience and priorities to advance action on community goals.

## Co-Investigator – The Impact of Engagement Awards

- Investigating the roles of science institutions' public engagement awards in incentivizing science communication and engagement, and in supporting institutional cultures that value engagement and greater inclusion of diverse publics in science institutions.
- Conducting content analyses and interviews with award winners, finalists, and staff to understand scope and impact of science institutions' engagement awards, with support from the Kavli Foundation and in collaboration with researchers at the University of Texas at Austin, Rutgers University, and the American Society for Cell Biology.

## Consultant - Landscape of Public Opinion of Artificial Intelligence

The American Association for the Advancement of Science (AAAS), Washington, D.C., USA

- Conducted assessment of public opinion research, policies, and equity issues concerning AI, outlining recommendations for policymaking, engagement, and future research in a white paper to inform future AAAS projects.
- Focused on AI related to addressing the COVID-19 pandemic, issues of equity in representation and • distribution of risk and benefits, and AI in other public health contexts.

## Project Assistant - Engagement with Chemistry

UW-Madison Life Sciences Communication Department, Madison, WI, USA

- Subcontracted on NSF grant by the Museum of Science, Boston, with the American Chemical Society to test how to create effective communication and engagement with chemistry within and outside of science museums.
- Involved in grant proposal development, budgeting, and reporting to NSF. Award # AISL-1612482, PI: Larry Bell. \$154,745 (total grant: \$2.6 million).

## Consultant - Public Perceptions of Uncertainty in Science

The National Academies of Sciences, Engineering, & Medicine (NASEM), Committee on Reproducibility and Replicability in Science, Washington, D.C., USA

Commissioned by NASEM committee to synthesize research on public perceptions of uncertainty in • science and analyze news coverage of reproducibility and replicability in science, to inform the NASEM report, Reproducibility and Replicability in Science.

## Project Assistant - Engagement on Emerging Science

The Morgridge Institute for Research, Madison, WI, USA

Designed and conducted social science research on public and scientists' perceptions of environmental and science issues, through experiments, surveys, interviews, and focus groups, to build effective communication and engagement.

2017-2019

2020

Spring 2018

2020-present

2015-2018

Developed successful NSF grant application on "Enabling decision-relevant debates about human genome editing," testing how to enable deliberation and engagement across value divisions relevant to gene editing (Award # SES-1827864); \$449,977.

## Consultant - Madison 2014 Carbon Emissions Inventory

City of Madison, WI; Energy Analysis and Policy Capstone.

- Conducted carbon emissions inventory for the City of Madison, modeling opportunities for emissions reductions and impacts on air quality, public health, and sustainability goals,
- Presented findings to the Sustainable Madison Committee, City of Madison representatives, local energy industries and utilities, and non-governmental environmental and developmental organizations.

## Bunn Distinguished Graduate Fellow in Energy Policy

UW-Madison Energy Analysis and Policy Certificate Program, Madison, WI, USA

- Studied technical, environmental, economic, health, and policy factors shaping domestic and global energy systems.
- Researched public perceptions of hydraulic fracturing in the U.S. and implications for communication and policymaking.

#### Tobis Fellow - Gender Equity in Academia

UC-Irvine Center for the Scientific Study of Ethics and Morality, Irvine, CA, USA

Continued research on gender equity in academia, started at the Radcliffe Institute for Advanced Study • (below).

#### Research Assistant - Gender Equity in Academia

Radcliffe Institute for Advanced Study, Harvard University, Cambridge, MA, USA

Researched barriers to gender equity in academia, conducting interviews with university presidents, • faculty, and students, and analyzing resulting qualitative data to identify challenges and best practices for achieving equity.

## **TEACHING**

Instructor of Record – Data Analysis in Communication Research	Spring 2019
Life Sciences Communication 660, University of Wisconsin-Madison	

Graduate quantitative data methods and analysis course for communication research. Responsible for content and instruction (11 students).

#### Teaching Assistant – Public Opinion & Science

Life Sciences Communication 902, University of Wisconsin-Madison

Interdisciplinary graduate seminar on communication, public opinion, and media effect theories relevant to science communication research and practice (25 students).

## Teaching Assistant – The Science of Storytelling

Life Sciences Communication 100, University of Wisconsin-Madison

Interdisciplinary undergraduate expository writing and public speaking course. Independently taught two sections of 15 students each.

Spring 2018

Spring 2015

2014-2015

2013-2014

2012-2013

Fall 2018

students).	
<b>Teaching Assistant – Forum on the Environment</b> Environmental Studies 101, University of Wisconsin-Madison	Spring 2016
Interdisciplinary undergraduate lecture course – organized weekly guest lectures and dev and small-group activities (75 students).	veloped individual
<b>Teaching assistant – Introduction to Energy Analysis and Policy</b> Environmental Studies 809, University of Wisconsin-Madison	Fall 2015
Interdisciplinary graduate course on energy systems, technologies, and domestic and glo students).	obal energy policy (30
HONORS AND AWARDS	
<b>AEJMC Article of the Year, Second Place – ComSHER Division</b> Association for Education in Journalism and Mass Communication, Division on Communicating Science and Risk	2021 e, Health, Environment,
For: Howell, E. L. & Brossard, D. (2021). (Mis)informed about what? What it means to be a science-literate citizen in a digital world. <i>Proceedings of the National Academy of Sciences, 118</i> (15). DOI: 10.1073/pnas.1912436117.	
<b>AEJMC Top Paper Award, Third Place – Electronic News Division</b> Association for Education in Journalism and Mass Communication	2020
For: Anderson, J. T., Howell, E. L., Xenos, M. A., Scheufele, D. A., & Brossard, D. Learning without seeking? Incidental exposure to science news on social media & knowledge of gene editing.	
Society for Risk Analysis Travel Award	2019
<b>Professional Development Grant &amp; Travel Grant</b> Energy Analysis and Policy Program, University of Wisconsin-Madison	2019
<b>Graduate Travel Awards for Professional Development</b> Department of Life Sciences Communication, University of Wisconsin-Madison	2015-2019
Linda Latham Scholar, Summer Study on Energy Efficiency in Buildings American Council for an Energy Efficient Economy	2016
<b>Bunn Distinguished Graduate Fellow</b> Energy Analysis and Policy Program, University of Wisconsin-Madison	2014-2015
Jerome and Hazel Tobis Fellow Center for the Scientific Study of Ethics and Morality (Ethics Center), University of California Irvine School of Social Sciences	2013-2014
Science and Technology Studies Undergraduate Essay Prize Kennedy School of Government, Harvard University	2013

# Teaching Assistant - Science & Social Media

Life Sciences Communication 875, University of Wisconsin-Madison

Interdisciplinary graduate seminar on science communication research and practice through social media (14 students).

Spring 2018

## U.S. Presidential Scholar - Montana representative

U.S. Department of Education

## **PUBLICATIONS**

## Peer-reviewed articles

- Krause, N. M., Beets, B., Howell, E. L., Tosteson, H., & Scheufele, D. A. (2023). Collateral damage from debunking mRNA vaccine misinformation. *Vaccine* 41(4): 922-929. DOI: 10.1016/j.vaccine.2022.12.045
- Wirz, C. D., Shao, A., Bao, L., Howell, E. L., Monroe, H., Chen, K. (2021). Media systems and attention cycles: Trends and topics in news coverage of COVID-19 in the U.S. and China. *Journalism & Mass Communication Quarterly*. DOI: 10.1177/10776990211049455
- Calice, M. Bao, L., Freiling, I., Howell, E. L., Xenos, M. A., Yang, S., Brossard, D., Newman, T. P., & Scheufele, D. A. (2021). Polarized platforms? How partisanship shapes perceptions of "algorithmic news bias." *New Media and Society*. DOI: 10.1177/14614448211034159.
- Anderson, J. T., **Howell, E. L.,** Xenos, M. A., Scheufele, D. A., & Brossard, D. (2021). Learning without seeking? Incidental exposure to science news on social media & knowledge of gene editing. *Journal of Science Communication*, 20(04): 1-22. DOI: 10.22323/2.20040201.
- Kollmann, E. K., Beyer, M., **Howell, E. L.,** Anderson, A., Weitzman, O., Bequette, M., Haupt, G., Velázquez, H., Yang, S., & Scheufele, D. A. (2021). Collaboration for chemistry communication: Insights from a research-practice partnership. *Journal of Science Communication*, 20(4): 1-13. DOI: 10.22323/2.20040801.
- Howell, E. L., Yang, S., Holesovsky, C., & Scheufele, D. A. (2021). Communicating chemistry through cooking & personal health: Everyday applications increase perceived relevance, interest, & self-efficacy in chemistry, *Journal of Chemical Education*. DOI: 10.1021/acs.jchemed.1c00125.
- Howell, E. L. & Brossard, D. (2021). (Mis)informed about what? What it means to be a science-literate citizen in a digital world. *Proceedings of the National Academy of Sciences, 118*(15). DOI: 10.1073/pnas.1912436117.
- Howell, E. L. (2020). Science communication in the context of reproducibility and replicability: how nonscientists navigate scientific uncertainty. *Harvard Data Science Review*, 2(4). DOI: 10.1162/99608f92.f2823096
- Howell, E. L., Scheufele, D. A., Brossard, D., & Xenos, M. A. (2020). Deference and decision-making in science and society: How deference to scientific authority goes beyond confidence in science & scientists to become authoritarianism. *Public Understanding of Science*, *29*(8): 1-19. DOI: 10.1177/0963662520962741.
- Wirz, C. D., **Howell, E. L.**, Brossard, D., Xenos, M. A., & Scheufele, D. A. (2020). The state of GMOs on social media: An analysis of state-level variables and discourse on Twitter in the U.S.A. *Politics and the Life Sciences*, 1-16. DOI:10.1017/pls2020.15.
- Howell, E. L., Kohl, P., Scheufele, D. A., Clifford, S., Shao, A., Xenos, M. A., & Brossard, D. (2020). Enhanced threat or therapeutic benefit? Risk & benefit perceptions of human gene editing by purpose & heritability of edits. *Journal of Risk Research*. DOI: 10.1080/13669877.2020.1806911.
- Howell, E. L., Yang, S., Beets, B., Brossard, D., Scheufele, D. A., & Xenos, M. A. (2020). What do we (not) know about global views of human gene editing? Insights and blind spots in the CRISPR era. *The CRISPR Journal*. 3(3): 148-155. DOI: 10.1089/crispr.2020.0004.
- Howell, E. L., Wirz, C. D., Scheufele, D. A., Brossard, D., & Xenos, M. A. (2019). Seeing through riskcolored glasses: Risk and benefit perceptions, knowledge, and the politics of fracking in the United States. *Energy Research & Social Science*. 55: 168-178. DOI: 10.1016/j.errs.2019.05.020.

- Howell, E. L., Nepper, J., Brossard, D., Xenos, M. A., & Scheufele, D. A. (2019). Engagement present and future: Graduate student and faculty perceptions of social media and the role of the public in science engagement. *PLoS ONE*. 14(5): e0216274. DOI: 10.1371/journal.pone.0216274.
- Rose, K. M., **Howell, E. L.**, Su, L. Y.-F., Xenos, M. A., Brossard, D., & Scheufele, D. A. (2019). Distinguishing scientific knowledge: The impact of different measures of knowledge on GM food attitudes. *Public Understanding of Science*. 28(4): 449-467. DOI: 10.1177/0963662518824837.
- Howell, E. L., Wirz, C. D., Brossard, D., Jamieson, K. H., Scheufele, D. A., Winneg, K. M., & Xenos, M. A. (2018). National Academies of Sciences, Engineering, and Medicine report on genetically engineered crops influences public discourse. *Politics and the Life Sciences*. 37(2): 250-261. DOI:10.1017/pls.2018.12.
- Rose, K. M., **Howell, E. L.**, Scheufele, D. A., Brossard, D., Xenos, M. A., Shapira, P., Youtie, J., & Kwon, S. (2018). The values of synthetic biology: Researcher views of their field and participation in public engagement. *BioScience*. 68(11): 782-791. DOI: 10.1093/biosci/biyo77.
- Scheufele, D. A., Xenos, M.A., **Howell, E. L.**, Rose, K. M., Brossard, D., & Hardy, B. W. (2017). U.S. attitudes on human genome editing. *Science*. 357(6351): 553-554. DOI: 10.1126/science.aan3708.
- Howell, E. L., Li, N., Akin, H., Scheufele, D. A., Xenos, M. A., & Brossard, D. (2017). How do U.S. state residents form opinions about 'fracking' in social contexts? A multilevel analysis. *Energy Policy*. 106: 345-355. DOI: 10.1016/j.enpol.2017.04.003.
- Monroe, K. R., Choi, J., Howell, E., Lampros-Monroe, C., Trejo, C., & Perez, V. (2014). Gender equality in the ivory tower, and how best to achieve it. *PS: Political Science & Politics.* 47(2): 418-426. DOI: 10.1017/S104909651400033X.

## White papers and reports

- Hendricks, R., AbiGhannam, N., Howell, E., Dudo, A., & Eatman, T. (2022). Awarding engagement: The impact of scientific societies' awards recognizing work at the intersections of science and society. <u>https://resources.informalscience.org/awarding-engagement-impact-scientific-societies%E2%80%99-awards-recognizing-work-intersections-science-and</u>
- Newman, T. P., **Howell, E. L.**, Bao, L., Beets, B., & Yang, S. (2020). Landscape assessment of public opinion work on use of AI in public health. Commissioned by the *AAAS Center for Public Engagement with Science and Technology*, the American Association for the Advancement of Science.
- Howell, E. L. (2018). Public perceptions of uncertainty and media reporting of reproducibility and replicability in science. Commissioned by *The Committee on Reproducibility & Replicability in Science*, National Academies of Sciences, Engineering, and Medicine.

## Chapters in edited volumes

- Howell, E. L., Scheufele, D. A., Brossard, D., Xenos, M. A., Kwon, S., Youtie, J., & Shapira, P. (2020). Scientists' and the publics' views of synthetic biology. In: B. D. Trump, C. Cummings, J. Kuzma, & D. D. Linkov (Eds.), *Synthetic Biology 2020: Frontiers in risk analysis and governance* (pp. 371-387). Cham, Switzerland: Springer.
- Howell, E. L. & Brossard, D. (2019). Science engagement & social media. In Newman, T. (Ed.), *Theory and Best Practices in Science Communication Training*. Routledge: New York, NY.
- Howell, E. L. & Scheufele, D. A. (2018). Public engagement. In M. H. Bornstein (Ed.), *The SAGE Encyclopedia of Lifespan Human Development* (4: 1779-1781). Washington, DC: Sage Publications.

## Perspectives & op-eds

- Christopherson, E. G., Howell, E. L., Scheufele, D. A., Viswanath, K., & West, N. P. (2021). How science philanthropy can build equity. *Stanford Social Innovation Review*, Fall. https://ssir.org/articles/entry/how\_science\_philanthropy\_can\_build\_equity#.
- Newman, T., Howell, E. L., & Brossard, D. (2021). COVID-19 public health messages have been all over the place – but researchers know how to do better. *The Conversation*, April 14. <u>https://theconversation.com/covid-19-public-health-messages-have-been-all-over-the-place-but-researchers-know-how-to-do-better-150584</u>

## **INVITED TALKS**

Science Public Engagement Partnership (SciPEP) Conference – Communicating the Future: Engaging the Public in Basic Science, Virtual – July 28, 2021

Guest speaker on deference to scientific authority in societal decision-making and its implications for civic and science engagement.

Mission Forward podcast, Season Three – The Future of Health, Virtual – June 14, 2021 Guest speaker on improving communication around public health – lessons from the COVID-19 pandemic. <u>https://mission.partners/episode-305-why-public-health-matters-to-private-lives-with-emily-howell-and-todd-newman/</u>

Center for Population Health Research, University of Montana – Science Meeting, Missoula, MT – February 9, 2021

Guest speaker on communicating for civic engagement in science and health.

**How Society Deals with Technological Hazards, University of Wisconsin**, Virtual – April 27, 2020 Guest lecturer on risk perceptions and risk communication in health and science.

National Academies of Sciences, Engineering, and Medicine – Symposium Addressing Misinformation, Washington, D.C. – February 20, 2020

Panelist, discussing public perceptions of scientific uncertainty, on panel on *Trust in online health and science information*.

- Sigma Xi Annual Meeting Science of Science Communication panel, Madison, WI November 15, 2019 Panelist, presenting work on advancing research-practice partnerships in communication, engagement, and informal learning.
- Midwest Center of Excellence Vector-Borne Disease research group, Madison, WI October 10, 2019 Advised on communication strategies, particularly for addressing and preventing spread of misinformation, concerning Lyme disease prevention and treatment.
- Risk Communication, University of Wisconsin Course, Madison, WI September 26, 2019

Guest lecturer on the roles of trust and knowledge in public risk perceptions on health and science issues.

Holtz Center for Science & Technology Studies Special Brown Bag on Gene Editing, Madison, WI – March 13, 2019

Panelist, presenting work on U.S. views of human gene editing: Understanding and deliberating across diverse publics, goals, and values.

Department of Life Sciences Communication Colloquium, Madison, WI – February 13, 2019

Invited talk presenting research on understanding scientists, publics, and outcomes for science engagement.

# Committee on Reproducibility & Replicability in Science, National Academies of Sciences, Engineering, and Medicine, Washington, D.C. – April 18, 2018

Invited presentation on public perceptions of scientific uncertainty and media coverage of reproducibility and replicability in science.

**Department of Life Sciences Communication Colloquium,** Madison, WI – March 21, 2018 Invited talk presenting research from: **Howell, E. L.**, Nepper, J., Brossard, D., Xenos, M. A., Scheufele, D. A., Cohort shift in engagement? Graduate student and faculty perceptions of engagement, social media, and the role of the public.

Environmental Studies 901 – Professional Development for the Energy Analysis and Policy Certificate Program, Madison, WI – October 12, 2017.

Invited talk on introduction to science communication theories and applications, for interdisciplinary graduate seminar in Energy Analysis and Policy program.

**Bagels and Research Colloquium, Morgridge Center for Public Service**, Madison, WI – October 5, 2017. Invited presentation on *Science Engagement Across Campus: The Wisconsin Science Festival and Beyond*, on campus researchers' views of science engagement and the role of citizens and scientists in engagement and decision-making around science issues.

## PEER-REFEREED CONFERENCES

American Association for the Advancement of Science (AAAS) Annual Meeting, Washington, D. C. – March 2-5, 2023

Session organizer for *Establishing boundary-spanning scientists and civic leaders across sectors* – panel discussion with Elizabeth Christopherson, Frances Colón, Tiffany Taylor, and Joyce Yen

**American Association for the Advancement of Science (AAAS) Annual Meeting,** Virtual – January 4-7, 2022

Molder, A. L., **Howell, E. L.**, Scheufele, D. A., DeSalazar, M., Kirschner, E., & Goodwin, S. Reaching beyond the proverbial choir with research-practice partnerships in filmmaking. Poster session.

Science Public Engagement Partnership (SciPEP) Conference – Communicating the Future: Engaging the Public in Basic Science, Virtual – July 27-28, 2021

**Howell, E. L.,** DeSalazar, M., Goodwin, S., Kirschner, E., Martinek, A., Qian, Y., & Scheufele, D. A. (2021, July). *Connecting research and storytelling to engage with audiences through documentary film: insights from a scientist-filmmaker collaboration.* Poster session.

## Society for Risk Analysis Annual Meeting, Virtual – December 14-17, 2020

Howell, E. L., Monroe, H., Wirz, C., Shao, A., Bao, L., & Chen, K. (2020, December). Public opinion & news coverage of COVID-19: Risks & responsibility in U.S. perceptions of the pandemic. Conference presentation.

## Association for Education in Journalism and Mass Communication (AEJMC),

San Francisco, CA – August 6-9, 2020.

Anderson, J., **Howell, E. L.,** Xenos, M. A., Scheufele, D. A., & Brossard, D. (2020, August). Learning without seeking: Incidental exposure to science news on social media may fill knowledge gaps. Conference paper.

## Public Communication of Science and Technology (PCST), Virtual – 2021.

Howell, E. L., Scheufele, D. A. (2020, May). U.S. scientists' views of gene editing: Measuring short-term impact of the documentary film, *Human Nature*. Conference paper.

## Society for Risk Analysis Annual Meeting, Arlington, VA – December 8-12, 2019.

Howell, E. L., & Scheufele, D. A. CRISPR benefit, risk, and ambivalence: The impact of the documentary *Human Nature* on scientists' views of human gene editing. Conference paper.

International Communication Association, Washington, D.C. - May 24-28, 2019.

Howell, E. L., Wirz, C. D., Scheufele, D. A., Brossard, D., & Xenos, M. A. Seeing through risk-colored glasses: Risk, benefit, and political polarization in U.S. views of fracking. Conference paper.

American Association for the Advancement of Science Annual Meeting, Washington, D.C. February 14-17, 2019.

Panelist on *Improving Attitudes towards Chemistry through Informal Science Communication*, presenting Public views of chemistry: Relations to interest, relevance, and self-efficacy. Part of work on NSF Award # AISL-1612482.

- Society for Risk Analysis Annual Meeting, New Orleans, LA December 2-6, 2018.
  Howell, E. L., Scheufele, D. A., Brossard D., Xenos, M. A., Deference, risk, & benefit in public perceptions of human genome editing. Conference presentation.
- Visitor Studies Association Annual Conference, Chicago, IL June 20, 2018 Panelist on What Research Tells Us About Support Engagement in Science, presenting Capturing interest, relevance, and self-efficacy for science engagement. Part of work on NSF Award # AISL-1612482.

#### Society for Risk Analysis Annual Meeting, Arlington, VA – December 11-12, 2017.

**Howell, E. L.**, Kohl, P., Scheufele, D. A., Brossard D., Xenos, M. A., U.S. public on human genome editing: Purposes of edits drives attitudes. Conference presentation. *Presented in panel on Risk Communication in Public Health and Medical Contexts.* 

#### International Public Science Events Annual Conference, Madison, WI – June 5-6, 2017.

Led session *Scaling Up While Drilling Down* on applying social science to science event design, outreach, and evaluation. Presented research from **Howell, E. L.**, Xenos, M. A., Scheufele, D. A., Brossard D., The role of values in understanding public and expert risk and benefit perceptions of the science. Conference paper.

**American Association for the Advancement of Science Annual Meeting**, Boston, MA – February 16-18, 2017.

**Howell, E. L.**, Wirz, C. D., Brossard, D., Scheufele, D. A., Jamieson, K. H., Winneg, K., & Xenos, M. A., The NAS release a consensus report on GE crops – with what impact? Conference poster.

Midwest Association for Public Opinion Research Annual Conference, Chicago, IL – November 18, 2016. Howell, E. L., Xenos, M. A., Scheufele, D. A., Brossard D., Public and expert perceptions of synthetic biology: The role of values in understanding public and expert risk and benefit perceptions of the science. Conference paper. *Presented in the Science and Technology panel.* 

# Association for Politics and the Life Sciences Annual Conference, Madison, WI –

October 23-24, 2015.

**Howell, E. L.**, Brossard, D., Scheufele, D.A., Xenos, M.A. Effects of ideology, trust, and knowledge on public risk-benefit perceptions of hydraulic fracturing in the U.S. Conference presentation. *Presented in the Energy Panel.* 

**The International Association for Media and Communication Research Annual Conference**, Montreal, QC, Canada – July 12-16, 2015.

Howell, E. L., Li, N., Akin, H., Brossard, D., Scheufele, D. A., & Xenos, M. A. Modeling public perceptions of 'fracking:' A multilevel approach. Conference presentation. *Presented at the Environment, Science, and Risk Communication Working Group*.