A JOURNAL BY SISSA MEDIALAB

JCOM

# Public Communication of Science and Technology Symposium in South Bend, Indiana, U.S.A.

**Reviewed Conference**

PCST Science Communication Symposium
Civic Science & Ethics in the Age of AI: Building Trust
South Bend, IN, U.S.A.
9–11 July 2024

**Reviewed by**

**Marlit Hayslett and Maggie Fink**

**Abstract**

This conference review discusses the July 2024 Public Communication of Science and Technology (PCST) symposium held in South Bend, Indiana, the first PCST symposium held in the United States. It reflects on speakers, topics, and logistics of the event.

**Keywords**

AI tools in science communication; Citizen science; Public understanding of science and technology

Received: 13th August 2024
Accepted: 30th September 2024
Published: 30th October 2024

## 1 ▪ Introduction

European scholars and practitioners have been pivotal in driving science communication (scicomm) which is highlighted by the Public Communication of Science and Technology (PCST) presence internationally. However, over the past decade, there has been growing momentum in the United States to expand its presence in the field [Davies et al., 2021; Massarani et al., 2023; Rose et al., 2020]. One sign of this growth is the first PCST symposium held in the United States at the University of Notre Dame in South Bend, Indiana in 2024. Keynote speaker Dietram Scheufele shared: "This meeting illustrated how exciting it will be for scicomm practitioners, artists, scholars, and other professionals to connect with a network of like-minded folks here in the United States. Especially as private American philanthropies increasingly invest in science communication across different areas of scholarship and practice, the timing couldn't be more fortuitous for a PCST meeting in the U.S.A."

With the rise of artificial intelligence across nearly every discipline, the theme of the symposium "Civic Science and Ethics in the Age of AI: Building Trust", was a timely focus for science communication researchers and practitioners. Over 20 speakers were featured and approximately 70 attendees were present at the symposium which took place July 9–11. For co-organizer Joanne Fahey, Director of Research Communications for Notre Dame Research, "The goal of this event was to foster dialogue and collaboration on critical issues at the intersection of science, ethics, and public trust. By bringing together academics and practitioners, we aimed to explore the role of artificial intelligence in society and its implications for civic science."

## 2 ▪ Symposium highlights

The topical focus for the symposium was artificial intelligence (AI), and how science communication can be enhanced or compromised by AI. The agenda was well-balanced, featuring individual speakers, panels, demonstrations, and interactive simulations. This diversity in the programming created a meaningful agenda of topics for the two-day conference. Speaker Dan Farkas of the Ohio State University was particularly impressed by "the organic integration and overlap of the speakers' topics" without any discussions among speakers ahead of time. Speaker highlights include:

- Amy Aines, co-author of Championing Science, opened the symposium with a provocative talk on trustworthiness and why reputation matters even more in our AI world. Aines advised attendees to proactively communicate their benevolence and integrity, not just their abilities. "Get in the habit of revealing what makes you trustworthy when you introduce yourself and talk about your work. Have explicit conversations to reach agreement on the appropriate use of AI, so you can build productive relationships with colleagues and collaborators."
- Dietram Scheufele (University of Wisconsin at Madison) approached the concept of civic science from the perspective of wicked policy problems and how AI may, or may not, be a part of the solution. In the context of public engagement, he advocated for bi-directional dialogue and the importance of listening to be able to know what the public actually wants (or does not want) from the scientific community when it comes to AI.

- Dan Farkas (Ohio State University) shared his experiences using different types of AI in his strategic communications practice. He addressed how AI tools help improve research workflow and how their limitations show themselves as one tool cannot meet all needs. When he touched on how to use AI in an ethically responsible way, he posed thought-provoking questions including "*What do I do with the time I save?*". From an ethics perspective, if AI cuts your manuscript preparation time by 20%, do you use the time saved for more work, or for leisure?
- In a visit to the Digital Visualization Theater, Keith Davis (University of Notre Dame) led participants through how to use a storytelling framework for effective science communication. Specifically, he used the And, But, Therefore (ABT) structure of storytelling made popular by Randy Olson, which creates tension and resolution and puts the audience as the hero of the story being told. [Olson, 2018].
- Marlit Hayslett (Hayslett Consulting) led an immersive policy simulation in which participants considered whether AI should be used in the review of college applications. Attendees took on a specific role (e.g. high school guidance counselor, Google VP for Talent Recruitment) and position (i.e. for or against using AI to review college applications). In their roles, participants served on a mock task force to advise the university on how to proceed. A popular recommendation shared was to limit the use of AI to reviewing standardized aspects of an application. There was general agreement that AI should not be used for making the final decision of whether to accept or reject an application.
- The symposium closed with a talk from Fanuel Miundi (Northeastern University) who shared his perspective on the growing landscape of science communication activities and funding opportunities in the U.S. Miundi also discussed The Civic Science Media Lab, a project he founded to help scientists navigate the world of funding for science communication as the nature of civic sciences continues to rapidly change.

Multiple attendees described their renewed excitement about the potential for AI in civic science as laid out by several of the speakers and felt they were given tools for how to engage with AI in an ethical way. For many, this was their first time participating in a science communication symposium and their passion for building trust with their communities was reinforced by many of the talks, specifically Amy Aines and Dietram Scheufele. These talks highlighted some of the barriers scientists face when engaging with their target communities, including the lack of incentives in the tenure system and skills to navigate differing values systems.

Each of the talks were informative and provided valuable insights into ethical civic science. However, the majority of speakers were not practicing research scientists. The conference could have been enhanced by hearing from scientists who are engaged in active research as well science communication endeavors. The conference could have also benefited from more time given to panel members such as Tanya Berger-Wolf (Ohio State University) who uses AI extensively in her research. This perspective could have given participants more insight into how to build trust with stakeholders as new technology and research is introduced into communities.

In addition to the talks and demonstrations, attendees participated in a BioArtography Contest, a playful art-based game of science communication. Twelve posters, each with a

beautiful microscopic image were displayed in the venue. Participants were given a list of title descriptions (e.g. “the brain of a fruit fly larva” or “zinc oxide growing spikes on polysterene microbeads”) that they had to match to the correct image. It was a pleasant diversion that incorporated the role of art in science communication and stimulate conversation among the symposium participants.

## 3 ▪ Lessons learned

As with any academic gathering, there was much to be learned, especially as it relates to planning future events. One observation was that there was a lack of practicing researchers in attendance. While many graduate students from a variety of STEM fields were eager participants at the symposium, few senior researchers were in attendance. This highlights how more work needs to be done to engage scientists on the importance of science communication in the United States and encourage institutions to incentivize researchers to participate in training and professional development opportunities such as this PCST symposium.

A second observation worth noting was the backgrounds of the people who attended. Diversity is a priority for PCST, but it is not easy to define or attain because understandings of diversity are different [PCST Network, n.d.]. Often, the default definition of diversity is rooted in what we can see (or think we can see): race, gender, age, and similar demographic variables. In the context of PCST, it is more challenging to garner a demographically diverse cohort at a regional event. That was evident at Notre Dame as most of the participants were based in the U.S.A. and could be described as “White/Caucasian”. Participants also noted that many attendees identified as women, a rare phenomenon in STEM. This may be a double-edged sword, however, as women scientists may be bearing the load of science communication and community engagement, something that is not rewarded by academic institutions. [Guarino & Borden, 2017; McFarland et al., 2019]

A third observation touches on how to sustain momentum beyond the symposium. Staying in touch after a conference normally happens at the initiative of the individual attendees. If there is not a specific activity that we can contribute or commit to, often, we lose touch. This might be an opportunity for growth. One speaker suggested that an idea for a final session might be to convene those who are able to stay at the end and have a casual gathering for the purpose of identifying after-symposium opportunities. Further feedback from attendees on the impact of this symposium and the connections made may be worth pursuing in the coming months.

## References


Davies, S. R., Franks, S., Roche, J., Schmidt, A. L., Wells, R., & Zollo, F. (2021). The landscape of European science communication. *JCOM*, *20*, A01. https://doi.org/10.22323/2.20030201

Guarino, C. M., & Borden, V. M. H. (2017). Faculty service loads and gender: are women taking care of the academic family? *Research in Higher Education*, *58*, 672–694. https://doi.org/10.1007/s11162-017-9454-2

Massarani, L., Bray, H., Joubert, M., Ridgway, A., Roche, J., Smyth, F., Stevenson, E., van Dam, F., & de Abreu, W. V. (2023). The distribution of science communication teaching around the globe. *JCOM*, *22*, A05. https://doi.org/10.22323/2.22060205

McFarland, J., Hussar, B., Zhang, J., Wang, X., Wang, K., Hein, S., Diliberti, M., Forrest Cataldi, E., Bullock Mann, F., & Barmer, A. (2019). *The condition of Education 2019* [NCES 2019-144]. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC, U.S.A. https://nces.ed.gov/pubs2019/2019144.pdf

Olson, R. (2018). *Don't be such a scientist: talking substance in an age of style* (2nd ed.). Island Press.

PCST Network. (n.d.). *Equity, Diversity, and Inclusion (EDI)*. https://www.pcst.network/about/edi/

Rose, K. M., Markowitz, E. M., & Brossard, D. (2020). Scientists' incentives and attitudes toward public communication. *Proceedings of the National Academy of Sciences*, *117*, 1274–1276. https://doi.org/10.1073/pnas.1916740117

## About the authors

Marlit Hayslett, Ph.D. is a communication coach for scientists and researchers. She serves on the Scientific Committee of the Public Communication of Science and Technology (PCST) Network.

marlit@hayslett-consulting.com

Maggie Fink, Ph.D. is a postdoctoral researcher in Patricia Champion's lab at the University of Notre Dame. She is also a postdoctoral researcher in the College of Science at the University of Notre Dame working on science communication and community engagement.

mfink3@nd.edu

**How to cite**

Hayslett, M. and Fink, M. (2024). 'Public Communication of Science and Technology Symposium in South Bend, Indiana, U.S.A.'. *JCOM* 23(08), CR01. https://doi.org/10.22323/2.23080601.


ISSN 1824-2049. Published by SISSA Medialab. jcom.sissa.it