

# ScienceWriters 2024: Some Highlights of the Virtual Sessions

**Rachel Sells, Katherine Hollen, Grace Aneska Cote, Lalain D Aquino, Erin R Wunderlich, and Barbara Gastel**

Retaining the structure that had served its recent predecessors, the conference ScienceWriters 2024—organized by the National Association of Science Writers and the Council for the Advancement of Science Writing—consisted of virtual-only sessions on October 17–18, 2024, and in-person components in North Carolina’s Research Triangle on November 8–11. The current report presents highlights of the virtual-only sessions, which were largely panel discussions featuring science writers, science editors, and related professionals.

## **Free Your Data and Your Mind Will Follow: Exploring Journalists’ Role in the Open Data Movement**

By Rachel Sells

Large datasets can be crucial in reporting, but accessing and interpreting them can pose challenges. This issue was explored by a panel moderated by Maggie Koerth (editorial lead, CarbonPlan) and consisting of Tyler Dukes (lead editor, AI innovation in journalism, McClatchy), Lisa Sorg (adjunct professor, Wake Forest University, and North Carolina reporter, Inside Climate News), and Max Jones (cloud engineer, Development Seed).

The panelists started by discussing journalists’ access to data. As a commodity that businesses rely on, they said, data can be tricky to access. They discussed the need to promote equity in data access through outreach, open data policies, and implementation of accessibility tools. Privatization of data was noted as a concern, and, speaking on a lighter

note, Sorg later brought up her frustration with the loss of phone books.

The conversation shifted to issues with open data, especially data obscuration. Sorg cited the Duke Energy groundwater contamination incident as an example of intentional obscuration by using an inaccessible format. The panel also discussed unintentional obscuration, such as when data is provided in a format accessible to only part of the audience. For example, PDF files are easy for the public to consult but difficult to extract data from.

Koerth also raised the issue of activism regarding data availability. Jones said he sees his views on open data as values that guide his work as a whole, not a type of advocacy. Dukes said he sees “the process of doing journalism itself as activism” since the journalist is telling the reader what topics are worth attention.

## **When Words Aren’t Enough: How to Make Visuals Part of Your Storytelling**

By Katherine Hollen

This session addressed how visuals can facilitate science communication. Moderated by Rachel Ehrenberg, senior associate editor at *Knowable Magazine*, the discussion featured insights from Jen Christiansen, senior graphics editor at *Scientific American*, and Beth Rakouskas, creative director at *Science* magazine.

Ehrenberg discussed how visuals serve as entry points for readers, particularly through engaging “banner art” atop online stories. She said this art often provides the first impression of a story and encapsulates its essence and themes. A well-crafted banner, she stated, captures attention and sets the story’s tone, enticing readers to explore further. Ehrenberg also emphasized that effective visuals do more than draw readers in; they enhance understanding of complex scientific concepts by letting readers see the evidence or data themselves. This engagement, she said, makes intricate ideas more accessible and relatable.

Christiansen explained that graphics can function as primary and secondary storytelling media. As primary media,

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they convey the full story visually via a clear sequence of information. As secondary media, graphics support text-driven narratives; for example, they can alleviate pressure on written content by extracting dense or explanatory information from the main story, guiding readers through the narrative, and deepening their understanding.

Finally, Rakouskas underscored the power of visuals in capturing attention and driving engagement. Visuals, she said, are crucial for social media outreach—whether through art, photographs, or videos. She noted that posts featuring original visuals consistently achieve greater reach and more engagement than other posts do. She said that as graphics gain traction, they not only expand audiences but also enhance awareness of and interaction with content.

### **Working Together to Make a Difference: Science Communication Collaboration to Drive Real-World Impact**

By Grace Aneska Cote

Moderated by Erika Check Hayden (director, science communication program, University of California, Santa Cruz), this session featured 3 journalists' accounts of their impactful projects.

Filmmaker Elijah Yetter-Bowman discussed his documentary on the dangers of "forever chemicals" in firefighting gear. This initially slow-moving project, he explained, gained funds and momentum through a collaboration with the International Association of Fire Fighters. Yetter-Bowman described premiering the resulting film, "Burned: Protecting the Protectors,"<sup>1</sup> to a ballroom filled with firefighters. He noted that screenings of the film affected policies on components allowed in firefighters' gear.

Rodrigo Pérez Ortega, a *Science* staff writer based in Mexico City, said he was covering a paleontology story when he stumbled on a feud regarding a fossil that was stolen from Brazil and resided in Germany. Acting as a translator and mediator, Pérez Ortega helped bridge the communication gap between the 2 scientific communities. His efforts helped lead to the return of the fossil to Brazil. More generally, his reporting,<sup>2</sup> based on this situation, shed light on the broader ethical issues of colonialism in science.

Investigative reporter Yvette Cabrera, of the Center for Public Integrity, told of the award-winning series<sup>3</sup> she wrote about lead contamination in a Mexican American neighborhood in California. Suspicious that lead exposure might be causing behavioral problems that women in the community were reporting in their sons, Cabrera collaborated with the community and academia to determine lead concentrations in the soil. The findings, including a map of lead concentrations, eventually led to policies to address the hazards.

### **The Bookmaking Journey in Three Acts: A Guide for Debut Authors**

By Lalain D Aquino and Barbara Gastel

At this session, organizer Ferris Jabr and fellow science book authors Zoë Schlanger and Brandon Keim discussed the 3 phases of book authorship: finding an agent and crafting a proposal; reporting, writing, and funding; and publicity and marketing.

Points regarding finding an agent and crafting a proposal included the following: The author and agent should have compatible visions of the book. Writing a book proposal can take several months or more. Examples of successful proposals, which sometimes are obtainable from other authors or from agents, can serve as useful models.

Once a publisher accepts a book proposal, Keim said, prepare yourself for the long journey of writing the manuscript. This journey can take several months to several years. Keim reported experiencing burnout and recommended attending to one's mental and physical health. The speakers also discussed maintaining their financial health, as publishers' advances for science books generally do not suffice to live on. Schlanger mentioned having obtained several writing residencies, which provided both financial support and pleasant places to write. Keim and Jabr mentioned doing freelance writing or editing while writing their books.

In a science book, the information must be accurate. Jabr recommended hiring a third party to fact-check the manuscript. He indicated that different chapters can be checked at different times and by different people.

Keim noted that although publishers market books, authors have more responsibility to publicize them than before. Schlanger reported that meeting readers at events such as book tours has been very rewarding.

### **Nonhumans as Characters: What to Do When Your Subjects Can't Speak to You**

By Erin R Wunderlich

This session addressed how to portray nonhuman characters, living and otherwise.

Moderated by Brandon Keim (freelance journalist), the panel included Bathsheba Demuth (history professor, Brown University), Benji Jones (Vox correspondent), Filipa Ramos (lecturer, Institute Art Gender Nature, Basel, Switzerland), and Jenny Splitter (editor-in-chief, *Sentient*).

Keim said nonhuman species allow for insights into issues such as climate change and habitat destruction. But how to represent nonhuman subjects without overly anthropomorphizing? Demuth said not to totally avoid anthropomorphism, as developing a character promotes relatability. For example, in part through verb choice, she

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conveys in nonhydrological terms what a river does and represents. “Think about a river having a lifespan,” she said.

Splitter addressed using multiple perspectives, noting she often takes a solutions journalism approach—explaining what we do and do not know. She said she strives to answer questions such as what ethical issues exist and what biases people hold. When writing from the perspective of a nonhuman species, she said, avoid advocacy and rely on facts.

Others discussed ways to engage readers. “Make your writing somewhat cinematic,” Jones said. Speakers also said to use descriptive language, convey feelings such as wonder, and envision wants and needs of animals being portrayed.

In closing, the panelists recommended books applying concepts discussed. Among them: *Meet the Neighbors: Animal Minds and Life in a More-than-Human World*, by Brandon Keim; *Pests: How Humans Create Animal Villains*,

by Bethany Brookshire; *An Immense World: How Animal Senses Reveal the Hidden World Around Us*, by Ed Yong; *Arctic Dreams*, by Barry Lopez; and *Atlas Obscura: Wild Life: An Explorer’s Guide to the World’s Living Wonders*, by Cara Giaimo and Joshua Foer.

For information about the in-person sessions—which included professional-development events, science-related tours, networking opportunities, and much more—please see the conference program (at <https://sciencewriters2024.org/session>) and the National Association of Science Writers website (at <https://www.nasw.org/>). Information about plans for ScienceWriters2025 also will appear on this website.

## References and Links

1. <https://etherealfilms.org/burned/>
2. <https://www.science.org/content/article/it-s-second-extinction-retraction-deepens-legal-and-ethical-battle-over-rare-dinosaur>
3. <https://publicintegrity.org/topics/environment/ghosts-of-polluters-past/>