

URMA 2017: Promoting Public Appreciation for Science

By Ginger Pinholster

Amid increasingly polarized public attitudes toward science and technology, university communicators can play a vital role in raising awareness of the promise of scientific research.

The 2017 University Research Magazine Association (URMA) conference in Providence, R.I. offered validation for the work of science communicators as well as tips for effectively reporting research news in today's "hyper-partisan" times.

Brown University biologist Ken Miller, a respected science communicator, addressed continuing public denial of the well-supported theory of evolution. In addition, a panel of experts explored how best to communicate potentially polarized issues related to the environment and firearm injury prevention.

Do university research communicators have a responsibility to help promote science literacy and/or public appreciation for scientific research? This question was the focus of conversation during lunch with fellow conference attendees. The discussion prompted me to consider my bigger-picture purpose in deploying research news for a university headquartered in Daytona Beach, Fla. It also left me eager to learn new ways to communicate specific research topics that might cause some readers to disengage from the content.

My university, like many, strives to remain politically neutral. Still, in the current U.S. political climate, could a seemingly neutral scientific report on "noctilucent clouds" – space clouds that serve as sensitive indicators of human-caused climate change – cause some readers to tune out the topic?

In communicating such stories, Lucia Monge of the Rhode Island School of Design (RISD) Nature Lab urged URMA-Con attendees to consider potential pre-existing audience biases as a first step. As a second step, she said, deliver visual information in an interactive fashion. Passively presented content allows the audience to shut down. Like Monge, multiple speakers at URMA-Con emphasized the increasing value of multimedia such as animations and online videos to connect with an audience, no matter how short their attention span. A film festival, featuring outstanding university research videos, offered inspiration for achieving audience engagement.

Meera Subramanian, author of *A River Runs Again*, expressed optimism about the power of compelling stories to overcome ideological differences. "The only thing that's going to save us is story," said Subramanian, whose book describes India's environmental and cultural challenges, and efforts to confront them. Strong characters, sufficient facts to bring narrative alive through vivid descriptive passages, dialogue and metaphors help trigger readers' memories, brain chemistry and sense of discovery, she said. Subramanian also recommended starting with specific moments or images – such as the striking of a single match – and then "zooming out" to explore, for instance, the environmental hazards of traditional Indian cook-stoves, and the cultural and economic factors that have prevented many families from using safer stoves.

Of course, understanding and accurately reporting scientific information should always be a science writer's top priority, Subramanian emphasized. URMA speaker David Corcoran, long-time editor of the Science Times section of *The New York Times*, also stressed the importance of accuracy in science reporting. Corcoran, now associate director of the Knight Science Journalism program at MIT and senior editor of *Undark: Truth, Beauty, Science*, offered a detailed description of the pain-staking fact-checking that goes into all of the investigative reports on [Undark's website](#). For a split-second, *Undark's* incredibly thorough procedures for ensuring accuracy actually caused my hands to go numb with terror as I realized that I am the only fact-checker for my university's fledgling publication, *ResearchER*. As I continued to scribble notes during Corcoran's presentation, I wrote: "To do – formalize a fact-checking procedure!" I underlined this reminder three times.

As I left Providence – a vibrant setting for Urma-Con, rich with science and art – I continued to think about larger science-communication questions.

The value of scientific research and even higher education has somehow become a partisan issue. The Pew Research Center [reported](#) in July that political conservatives "have grown increasingly negative about the impact of colleges and universities on the United States," although they recognize the relationship between higher education and workforce preparation. Public attitudes regarding certain science-based issues such as climate change, evolution and energy dependence have become increasingly polarized.

Yet, we know from researcher [Cary Funk's recent report](#) and a related Pew survey that simply presenting clear, accurate scientific information to people does not affect their views on issues at the intersection of science and personal ideology. "How much people know about science only modestly and inconsistently correlates with their attitudes about climate and energy issues," Funk wrote, "while partisanship is a stronger factor in people's beliefs."

In sum, improving science literacy, while important, will never be a cure-all for the increasing polarization around certain issues.

Researchers are continuing to study the neurological bases and mechanisms behind science skepticism and denialism. Reporter Chris Mooney offered an excellent roundup of such research in a now slightly dated but still comprehensive [Mother Jones article](#). Researchers with Yale, George Mason and other universities are exploring specific word choices that can trigger different responses in listeners. [How-to science communication websites](#) abound.

For my small part, I continue to think that it is essential to communicate not just the "what" – the punchline of scientific research – but also the "how" (methodology / process), and most importantly perhaps, the "why." (Incidentally, that advice did not originate with me, but I cannot remember where I read or heard it. It may have been a nugget of wisdom passed along to me by my former boss Alan I. Leshner, CEO emeritus of the American Association for the Advancement of Science and namesake of the [Leshner Leadership Institute](#) for Public Engagement with Science.)

Even in the case of basic research, understanding the “why” behind the story – a scientist’s reasons for pursuing specific lines of inquiry – can help readers resonate with our stories. As Subramanian noted, compelling stories can save us.

Urma-Con 2017 was a wonderful opportunity for me. I was grateful for the chance to network with, and learn from my peers in the university research magazine world. I was also tremendously impressed by the dedication of the URMA Board, our hosts in Providence (Noel Rubinton of Brown University, and others) and the group’s strong commitment to accurately, effectively communicating research news. Many thanks to everyone who worked hard to put together a successful event in Providence.