
Guest Editorial: Science Communication

Britt Hall

University of Regina

**Scholarly and Research
Communication**

VOLUME 5 / ISSUE 1 / 2014

Only July 11, 2012, the day that hundreds of scientists marched on Parliament Hill in Ottawa to protest cuts to scientific research by the federal government, a reporter asked me why the public should care about science. I was dumbfounded, largely because I had never really considered that a question that needed answering. I had no idea there were people who did not inherently understand why science is important in our everyday lives. My thinking was naïve, and ever since I have been on a journey to more fully understand – and communicate – the way science influences our lives. As a result, when I was approached to act as guest editor for this edition of *Scholarly and Research Communication* (SRC), I was eager to help assemble an issue that would explore the importance of science in our lives.

Britt Hall is Associate Professor in the Department of Biology, University of Regina, 3737 Wascana Parkway, Regina, SK S4S 0A2. Email: britt.hall@uregina.ca .

One of the main themes of this issue's articles is the question: "What does science mean to me?" In my own exploration of that question, I realize that I never made the choice to be a scientist. This is further illustrated by my experience with my young children. I now understand that we are born with an inherent curiosity that is the basis of science. As Carl Sagan said: "Every kid starts out as a natural-born scientist, and then we beat it out of them." I was lucky in my upbringing, an interest in science was fostered. I grew up in a family of thinkers, with a family history of successful scientists and a couple of world-renowned biogeochemists to boot. That is one of the reasons why I was so surprised that anyone would actually question the value of science and equally surprised that I struggled with an answer.

CCSP Press

Scholarly and Research Communication

Volume 5, Issue 1, Article ID 0106156, 3 pages

Journal URL: www.src-online.ca

Received August 20, 2013, Accepted September 30, 2013, Published January 7, 2014

Hall, Britt. (2014). Science Communication

Scholarly and Research Communication, 5(1): 0106156, 3 pp.

© 2014 Britt Hall. This Open Access article is distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc-nd/2.5/ca>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

As a budding scientist, I assumed that I would pursue a health-related career. However, I struggled with the reductionist perspective of genetics, microbiology, and cell biology. A fateful visit to the Experimental Lakes Area (ELA) in the fourth year of my undergraduate degree introduced me to whole ecosystem science and another biogeochemist was born. At the ELA, scientists study the impacts of human-induced environmental changes, like climate change and pollution, in an entire ecosystem represented by a lake. This big-picture approach to science allows us to study the whole ecosystem as it functions, as opposed to laboratory or aquaria experiments that can only examine specific parts. The ELA deserves almost all the credit for making me into the scientist that I am today.

And so, the attempted closure of the ELA by Stephen Harper's Conservative government in May 2012 became a call to arms for me and for many others. Closing the ELA could be considered the ultimate form of muzzling, one that would serve to prevent the dissemination of science that might be hurtful to the current government's mindset that resource extraction must be pursued for its economic benefits without considering environmental consequences. By shutting down the premier freshwater science program in the world, research that illustrates impacts of climate change and pollutants on freshwater systems would be stopped in its tracks. Government and academic scientists would be demoralized and left scrambling, trying to revive their careers and find new research sites, thus removing the likelihood of protesting the policy meant to silence them. Most damaging of all – or most fruitful if muzzling is the goal – would be that countless future scientists would not be trained, thus hamstringing environmental science on freshwater systems for decades to come.

Thankfully, tens of thousands of Canadian and international scientists and citizens recognized the Harper government's folly and, due to intense public pressure, the Ontario government and the International Institute on Sustainable Development (IISD) stepped up to take over the ELA. As of early November, 2013, negotiations on the conditions of a transfer of the ELA from the federal government to these parties are ongoing, and there is optimism that the ELA will continue to operate.

We must use the ELA as a call to arms, this became obvious early on in the fight to save it. Since the announced closure of the ELA, as well as other important research facilities such as the Polar Environment Atmospheric Research Laboratory (PEARL) – and as a direct response to the lessons I learned during the fight to save ELA – it is increasingly apparent to me that the voices of scientists must be heard, both directly and through journalists, against the willful blockage of dissemination of the results of scientific research to the public. Scientists, and in particular those in academe, must embrace the responsibility of increasing science literacy inside of the classroom, as per tradition, but also for the general public. The submissions to the current issue on science communication address how to do that, from the perspectives of individual scientists in different fields.

So far, submissions to our series speak to the passion that our contributors have for science. Most are like me, science is in the fabric of their being. Our contributors recognize that the future of science depends on public support for science outside of our academic circles. They know that for the public to consider science when they go to

vote, whether locally or federally, they must understand that science is part of the fabric of our society. For this to happen, we as scientists must continue to tell people why our discipline is important and how it is vital for developing sound policy by which to govern. Rowland Lorimer, SRC Editor, and I hope to continue this conversation via regular calls inviting papers that tell us about the author's science, and why it is important to them and to the general public. It is our hope that this will serve as a regular reminder to all of the importance of science and will provide food for thought for others faced with the question: "Why should we care about science?"

Britt Hall, Guest Editor