communication scholars have a number of opportunities to secure external funding support for research in the humanities and the social sciences. While external funding is not for everyone, it can be beneficial in producing funding for graduate students, for colleges and departments in these difficult financial times, for scholars to be released from teaching so they can focus on research (release time money often goes directly to departments), and for scholars seeking to supplement their salaries with grant-related summer money, personnel, and travel budgets.

However, grants have professional costs: tenure and promotion evaluations do not tend to place much value on grant writing or solicitation (and converting grant solicitation text into an article or a chapter is not as easy as it sounds despite what you may have heard), control over your scholarship arc may be relinquished as grants can very easily drive grantees rather than the other way around, and much of your “free” time may be lost to administrating grants, managing staff and budgets, and writing annual reports.

Moreover, the recent economic crisis has made the process of soliciting and securing grants more challenging. Indeed, even before the 2008 recession, securing a grant was more difficult than getting published, and the subsequent malaise has worsened the situation, skewing the ratio further against grant seekers. Nevertheless, a number of opportunities exist, including non-federal grants and a highly competitive private philanthropic market driven mostly by specific mission statements that guide what organizations are willing to fund. State historical societies, for example, may support a scholar who is interested in discovering something about a historical event or even a current public issue associated with that specific state. The Frey Foundation
External support for research... is a zero-sum game, and sharp elbowing seems to be the tactic of the day.

in Minnesota and the Woodruff Foundation in Georgia tend to focus on state research activities. Private foundations such as Robert Wood Johnson, Bill and Melinda Gates, and others have missions dedicated to improving public health and welfare.

Corporate foundations also provide funding opportunities. The American Honda Foundation supports minority youth programs. The Intel Foundation supports math and science education. Others are much more ambiguous in what they support: the RGK Foundation seeks to advance knowledge, improve society, and realize human potential. While these foundations offer smaller grants, the grants often can be less demanding administratively, resulting in more of the award going to the research component than to indirect costs.

In addition, public external funding is increasingly competitive. This market is dominated by the National Institutes of Health (NIH), the National Science Foundation (NSF), and to a lesser extent the National Endowments and government agencies such as the Departments of Homeland Security, Defense, and Commerce. There are new sources for funding such as the Advanced Research Projects: ARPA-E (in energy) and IARPA (in intelligence), both of which invest in high-risk/high-payoff research programs. However, some sources have been restricted such as the NSF decision to cancel the entire political science grants cycle this year. Nonetheless, for most of the scholarly Communication community, the primary sources of funding are the NIH and the NSF.

Since 1997, when Congress last passed a federal budget, these agencies have been funded under continuing resolutions. The actual 2012 NSF budget was $7.1 billion, the 2013 estimate was $6.9 billion, and as of August 1, the 2014 budget request is $6.2 billion. The actual 2012 NIH budget was $30 billion, the 2013 estimate is $28.4 billion, and the 2014 budget request is $32 billion. Of course, authorizations, appropriations, and allocations can be very different. Along with medical research, President Obama’s priorities include advanced manufacturing, clean energy, climate change, STEM education, and “the brain.”

NIH and NSF budget allocations are the subject of much speculation nearly every year, although the NIH tends to fare better. The tug of war for congressional support tends to favor natural scientists associated with public health and well-being as well as medical research. Humanists and social scientists, who are funded predominantly by the NSF, face a different problem altogether. Consider Rep. Eric Cantor’s (R-VA) recent remarks to the American Enterprise Institute. He called for cutting federal funding for research in the social sciences, with the goal of “reprioritizing existing federal research spending.” According to Cantor, “Funds currently spent by the government on social science—including on politics of all things—would be better spent helping find cures to diseases.” Cantor and many of his colleagues in both houses of Congress believe social science is not science, as evidenced by their efforts to cut NSF behavioral and social science research in 2009.

Cantor is hardly alone in his rejection of social science as a method-based search for truth. The following quote from Rep. Dana Rohrabacher (R-CA) has haunted me for years. When asked about social and behavior research and its roles in studying the hard sciences, he said, “It sounds like to me you are putting all of the sociology and literature majors in charge of defining the goals of the engineering and science majors. Am I the only one who is skeptical of the social sciences here? We’re injecting
bureaucracies into the sciences” and bureaucracies are good at “transforming pure energy into solid waste…. You’ll be giving a forum to the very nuts you are trying to overcome.”

However, social sciences have a role to play. A June website post from the American Association for the Advancement of Science makes a powerful case for social science research in policy analysis and assessment. According to its author, University of Michigan’s Arthur Lupia, the methods of the social sciences are transparent and aim to allow others to reproduce the results. These disciplines help lawmakers and the public understand policy. He explains: “When people’s lives and livelihoods are at stake, it’s not enough to spin a good yarn. At these moments our nation benefits from distinguishing false stories from explanations that are consistent with precise logic and the best available evidence.” He offers as an example a recent study by Nils Weidmann and Idean Salehyan published in International Studies Quarterly that evaluated the effectiveness of the U.S. troop surge in Iraq by examining the ethnicity of Baghdad neighborhoods. They concluded that ethnic segregation and a well-timed surge may be able to reduce violence.

As a humanist reborn as a social scientist, I believe we need to ponder the effects these ongoing vitriolic debates between science and technology and humanism and the social sciences have on all of us. Both sides have introduced the venom. Humanists want to blame science for all the ills in the world. Social scientists want to tell scientists that the public neither likes them nor understands them and finds them effete and elitist. Scientists and technologists have grown defensive and suspect the motivations when humanists and social scientists come into their labs to study with them, especially when the humanists and social scientists do not understand the parlance and protocols of science and technology. Sometimes the scientists are correct, while at other times the social scientists are.

When I was researching my 2006 book Nano-Hype: The Truth About the Nanotechnology Buzz, I was very interested in how the public would come to understand what was happening in advanced science and technology, especially nanotechnology. I received this e-mail from the director of a science institute. Oddly enough, it starts by widening the gulf between experts and the public and ends with a shrouded call for social science, although I am certain that was unintended. “To those of us who are faced with the challenge of actually communicating this information, instead of the luxury of communicating about it, professional language is a necessity. Some ideas can only be expressed pragmatically in equation form; and if a person doesn’t understand the basics of a sp3 carbon bond, or he [isn’t] familiar with it as a concept, it would takes tens (if not hundreds) of hours to bring him/her up to speed. Why penalize the many thousands who took their chemistry courses in high school, and did their homework?

Nimis mea culpa. At times, I have grown incredibly frustrated with some scientists and engineers who simply refuse to believe they are not good communicators and what they are saying is not belaying public concerns. They ask us to participate in grants because the federal government has told them our participation is a requisite, but they want us as decorative window dressing. They think a web page, a YouTube video, or one evening public meeting over an entire calendar year is public outreach. I remember ending an NSF presentation with a slide that read, “Risk communication, like chemistry and toxicology, is not for amateurs.” If we want to bring the public along and help them understand the risks around them, we need to speak with them. Learning how to do that is the job of social scientists, not physicists or molecular biologists. Once in a while, citizen scientists like Richard Feynman or Carl Sagan surface, but they are the exception and not the rule.

If external support for research were an open-sum game, there would be room for everyone at the teats of federal largesse. That is not the case; it is a zero-sum game, and sharp elbowing seems to be the tactic of the day. That is unfortunate because no one wins, especially not the public.

I spend a lot of time talking to the public through traditional media, by digital media, and face to face. People want to understand what is happening around them. The information they receive about some of the sciences—nanotechnology, synthetic biology, geo-engineering, to name a few—is steeped with data and bizarre images, or flush with anecdotes and hyperbole. They want enough information to enable them to make the types of decisions they feel are in their best interests. Hazards are decided by science, but risks are socially constructed. To talk to the public about risk demands data about public perception and understanding, not just how much people know, but how they have learned what they know. As the world of science and technology becomes more complex and as our world becomes fuller with information of all sorts, the public will need to brought along. Otherwise, we will lose self-rule, and that is unacceptable. I believe we are near a tipping point where “the public sphere” of Dewey and Habermas will be irretrievable. However, humanists and social scientists may be able to help forestall the end of transparency and accountability.

To provide such help, we need to train a new generation of humanists and social scientists who will work hand in hand with science and technology. I recently spent five years determining how the public unpacks complicated
toxicological information about nanoscience, and I am about to commit myself to another decade of the same work. In the process, I will use grants to provide stipends, tuition, and health benefits to my advanced undergraduate and graduate students to help me move the communication of science and technology into the future. Other Communication scholars may anticipate doing this in their own sub-disciplines, including historiography, policy studies, and sociology, among others. Each of us can produce a small cohort of young scholars who will take the next set of important steps, but to do that we need access to grant support.

Smaller budgets increase the importance of tagging onto important policy initiatives when Communication scholars draft grant proposals. As mentioned above, new Executive Branch initiatives include advanced manufacturing, clean energy, climate change, STEM education, and the Brain Initiative. Advanced manufacturing might include research activities associated with expanding innovation, recommending innovation ecosystems that minimize waste and inefficiencies, or life cycle analysis involving the entire manufacturing process, from resource to recycling. Clean energy involves a host of sustainability communication and green community initiatives. Climate change issues seem to dominate a lot of policy discussion, including why the public seems unable to sense any exigent or salient climate crisis, why the media message has been unsuccessful and some outlier information has crowded out the objective data, and even why policy at the international and federal levels seems stymied, while smaller state and local initiatives are more successful.

STEM education is an economic as well as a scientific issue. We need to find ways to recruit and retain the best and the brightest, develop the next generation of innovators who are able to cross between disciplines seamlessly, and provide positive reinforcement for difficult choices that may need to be made at all levels of formal education. The Brain Initiative involves private foundations as well as government agencies in an interdisciplinary effort to cure debilitating diseases associated with aging, treat traumatic brain injuries, and create and sustain high-tech jobs. All of these need to be pursued in creative partnerships with business and industry, here and abroad. And all of these require public and stakeholder participation at multiple levels, as well as creative communication strategies and proprieties, especially in the digital world.

Finally, budget cuts and sequestration talk have long-term implications; external funding, especially by government agencies, may be perceived as unreliable. For example, when young social scientists (especially undergraduate and early graduate students) perceive the way social science plays out in the national grant community, they may move on to another career path. It is not difficult for students with method training to secure jobs in corporate marketing departments, where they can spend the rest of their lives selling the public on the importance of the next widget.

Humanities and social sciences must move beyond blame and find creative ways to prosper with their colleagues in science and engineering. Shaping the future is a team sport, and we need to respect all the players and drive ahead toward a unified goal without sacrificing one another when the times seem to toughen.

John Adams made a powerful case for humanists and social scientists in a letter he wrote to his wife, Abigail, in 1780. He said, “The science of government, it is my duty to study, more than all other sciences: the arts of legislation and administration and negotiation, ought to take place of, indeed to exclude, in a manner, all other arts. I must study politics and war that my sons may have liberty to study mathematics and philosophy. My sons ought to study mathematics and philosophy, geography, natural history, naval architecture, navigation, commerce, and agriculture, in order to give their children a right to study painting, poetry, music, architecture, statuary, tapestry, and porcelain.” Humanism and social science is all about understanding and calibrating the freedom we have to govern ourselves and become the best citizens possible.

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