

► BIG ENOUGH QUESTIONS

The following blog post was originally published as part of the Canadian Science Policy Centre Editorial Series: Response to COVID-19 Pandemic and its Impacts.

<https://sciencepolicy.ca/response-covid-19>

Many years ago, members of our research team were sitting in a garden with Dr. Rosemary Ommer, a scholar admired for her ground-breaking multi-disciplinary approach to research. We were undertaking our own study regarding policy and institutional models and barriers for collaboration across the academy when one of us, a synchrotron scientist, admitted that before the current project, he had never thought of pursuing research with anyone from the social sciences or humanities. Dr. Ommer paused and then responded that it was simply because he hadn't asked a big enough question yet.

As we find our way through this COVID-19 pandemic—as health-care providers, lab technicians, academics and professionals working from home, among so many others—we, who engage in research wonder what contributions we might make to address this unprecedented challenge. If there's one thing this crisis shows, it's that there's a complexity to these wicked problems (to borrow Horst Rittel and Melvin Webber's 1973 phrase¹) that demands all our attention. Every aspect of our lives is

affected—health, education, the economy, transportation, entertainment, food security, labour, trade, communications, entrepreneurship, culture, housing, leisure, and the list goes on. As Bruno Latour² has taught us, nature and science are inseparable and irrevocably entangled with our social world, our lives and interactions within our environments.

Which raises questions, or should raise questions, about how we do our research. Do we pursue our inquiries far, metaphorically and physically, from other knowledge seekers and producers? Do we assume we can engender the sorts of answers and evidence that will be helpful to governments and decision-makers from our vantage points in isolated departments?

Theorists might argue that we've become a true manifestation of the "risk society" articulated by Ulrich Beck³. That we're necessarily preoccupied with fear and safety while synchronously propagating the hazards that threaten us in this society-turned-experiment. Our collective effort to fight a microbe means millions can no longer pay rent, kids can't go to parks and numerous medical procedures are suspended. Meanwhile, lower-income workers including grocery cashiers, cleaning staff, bank tellers and child-care workers supporting others needed to work, are at the frontlines with nurses, doctors and

"If there's one thing this crisis shows, it's that there's a complexity to these wicked problems that demands all our attention."

epidemiologists in this so-called war. They're holding our communities and our lives together. Perhaps they always have, but these are unprecedented times with no room for perception as usual. We are experiencing society, nature and our place within them, differently. For those who one day see their lives and intellectual pursuits return to normal (whatever that means...) it will be difficult (dare we say, irresponsible?) to perpetuate any longer the presumed dichotomy, demystified by Emily Martin and Bruno Latour, between scientific knowledge, our labs and society⁴.

When we pursued our study on academic and scientific collaboration, it was clear that diverse researchers were interested in working together. Enablers like public funding were identified and fortunately governments increasingly recognize the



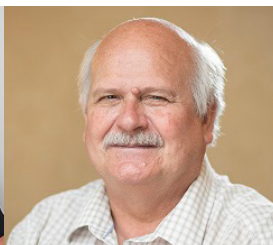
PEGGY SCHMEISER,

Assistant Professor,
Johnson Shoyama
Graduate School of
Public Policy



JENNIFER POUDRIER

Associate Professor,
Sociology, University of
Saskatchewan



DEAN CHAPMAN

Professor, Anatomy &
Cell Biology, Medical
Imaging, University of
Saskatchewan



ANNE BALLANTYNE

Strategic Research
Planning and
Facilitation Officer,
University of
Saskatchewan



KAREN WOOD

Adjunct Faculty
Member, Sociology,
University of
Saskatchewan



JOELENA LEADER

Research Facilitator,
University of
Saskatchewan

need for cross-disciplinary approaches as evidenced in calls for research proposals relating to COVID-19. But what is still apparent as our team embarks on a follow-up investigation of successes and failures in “convergence” research—the sort of research that authentically spans disciplines so as to answer large-scale global challenges—is that the academy and investigators are often ill-equipped to think and collaborate at large enough scales to be truly effective and relevant.

Academia and society celebrate certain modes of inquiry and what might be perceived as more applicable findings. Meanwhile, the theoretical and experiential perspectives of many are silenced. The marginalized voices of the majority—those impacted by intersections of gender, age, Indigenous status, language, employment loss, family structure, physical ability—all of us, inside and outside the academy, have much to say regarding the inequalities and injustices that are sidelined or feed on crises like this global infection. The world needs to know, and may reasonably expect, that those with the good fortune of time, publically funded jobs, research capacity and yes, academic freedom, are using our resources to find comprehensive solutions to our myriad, complex challenges. Now that we see, as Donna Haraway⁵ observes, that nature, science and society are inextricably interwoven, we must recognize this hybridity and respond.

Are we in the research community bold enough to work and learn together to collectively identify priorities for consideration? Are we prepared to risk rendering visible the limitations of our disciplinary perspectives and to embrace novel methods that permit new ways of thinking and enable our research communities to support public deliberations on effective scientific and social policies that have thus far eluded our isolated pursuits? Can we reassure Canadians that we’ve got their backs and that great minds with privileged resources will work together to support them through this COVID-19 crisis as well as others, including global conflict, food and water insecurity, climate change and social inequalities? Big enough questions indeed.

(The contributors to this editorial are currently collaborating on a research project to examine research capacity, models and barriers to address global large-scale challenges like COVID-19 at major research facilities and associated academic institutions in Canada. The project is being led through the Centre for the Study of Science and Innovation Policy at the Johnson Shoyama Graduate School of Public Policy and is funded by the Sylvia Fedoruk Canadian Centre for Nuclear Innovation.)

Notes

¹ See Horst W. J. Rittel and Melvin M. Webber, “Dilemmas in a General Theory of Planning,” *Policy Sciences* 4 (1973): 155–169.

² See Bruno Latour, *We Have Never Been Modern*, (Cambridge, Harvard University Press, 1993)

³ See Ulrich Beck, *Risk Society: Towards a New Modernity*, (London and New York, Sage, 1992)

⁴ See Emily Martin, “Anthropology and the Cultural Study of Science,” *Science, Technology, & Human Values* 23, no. 1. (1998): 24–44 and Bruno Latour, *Science in action: how to follow scientists and engineers through society*, (Cambridge, Harvard University Press, 1987).

⁵ See Donna Haraway, “A Cyborg Manifesto: Science, Technology, and Socialist Feminism in the Late Twentieth Century,” In *Simians, Cyborgs and Women: The Reinvention of Nature*, (New York; Routledge, 1991): 149–181 and Donna Haraway, “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective,” *Feminist Studies* 14, no. 3 (1988): 575–599.

