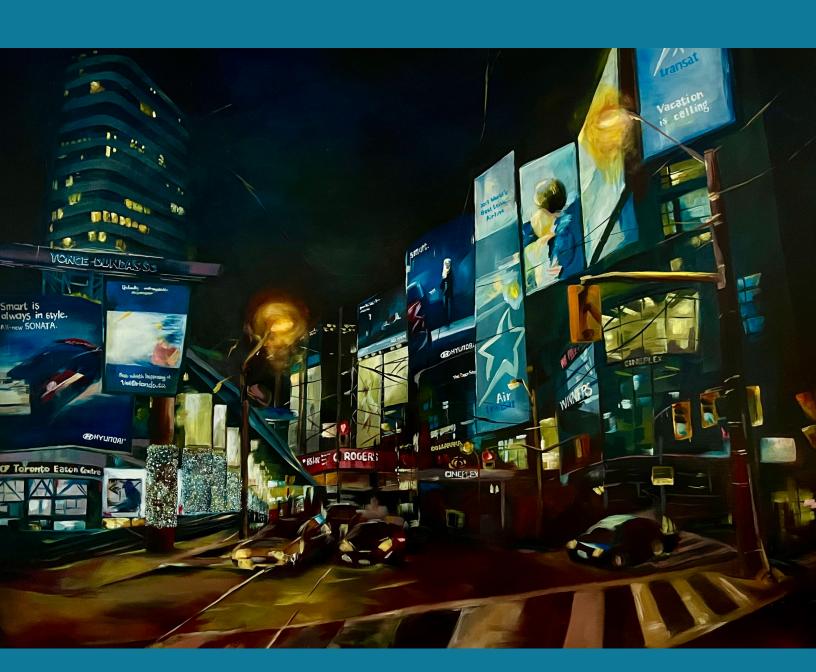


The Humanities and Health Policy

November 2023



The Humanities and Health Policy

An RSC Policy Briefing

Authors

Sean M. Bagshaw University of Alberta

Erika Dyck University of Saskatchewan

Maya J. Goldenberg University of Guelph

Bev Holmes Michael Smith Health Research BC

Esyllt Jones, FRSC University of Manitoba Julia M. Wright, FRSC Dalhousie University

Peer Review Monitor

Jacalyn Duffin, FRSC Queen's University

Peer Reviewers

Laurence Monnais, FRSC

Université de Montréal
University of Calgary
David Walker

Queen's University

Judy Segal The University of British Columbia

Suggested citation for Policy Briefing Report

Jones, E., Wright, J., et. al. The Humanities and Health Policy. Royal Society of Canada. 2023

Cover Art

Sophia Kyungwon Kim, The Screen Age, (2020)

Oil on canvas

Sophia K. Kim created traditional contemporary history painting to convey ambivalent feelings about the screen she felt while staying at home with her three children during the pandemic. She depicts Young and Dundas Square, the most splendid and vibrant place in Toronto, as an empty street full of colourful screens. While capturing the real-life moments of Young and Dundas Square in 2020 when intense social isolation began, the artist delivers not only the sense of solitude in the big city but also the fear of being overwhelmed by the power of screens and virtual reality which let people continue to connect during the pandemic.

Land Acknowledgement

The headquarters of the Royal Society of Canada is located in Ottawa, the traditional and unceded territory of the Algonquin Nation.

The opinions expressed in this report are those of the authors and do not necessarily represent those of the Royal Society of Canada.

Background on the Policy Briefing Report Process

Established by the President of the Royal Society of Canada in April 2020, the RSC Task Force on COVID-19 was mandated to provide evidence-informed perspectives on major societal challenges in response to and recovery from COVID-19.

The Task Force established a series of Working Groups to rapidly develop Policy Briefings, with the objective of supporting policy makers with evidence to inform their decisions.

About the Authors

Sean M. Bagshaw, Chair and Professor, Department of Critical Care Medicine, Faculty of Medicine and Dentistry, University of Alberta and Alberta Health Services

Erika Dyck, Professor and Canada Research Chair in the History of Health and Social Justice, Department of History, University of Saskatchewan

Maya J. Goldenberg, Professor, Department of Philosophy, University of Guelph

Bev Holmes, President and CEO, Michael Smith Health Research BC

Esyllt Jones (Co-Chair), FRSC, Professor, Department of History/Community Health Sciences, University of Manitoba

Julia M. Wright (Co-Chair), FRSC, George Munro Chair in Literature and Rhetoric, Department of English, Dalhousie University

Abbreviations

BIPOC Equity-deserving groups (Black, Indigenous, and Peoples of Colour)

CIHR Canadian Institutes of Health Research

EDI Equity, Diversity, Inclusion (and Accessibility)

NSERC Natural Sciences and Engineering Research Council of Canada

PHAC Public Health Agency of Canada

SARS SARS-CoV-1 pandemic, 2002-2004

SSHRC Social Sciences and Humanities Research Council of Canada

Tri-Agency CIHR, NSERC, and SSHRC

Table of Contents

Abbreviations	2
Executive Summary	
Recommendations	5
Introduction	6
I. The Value of Health Humanities in Health Crises: Multidisciplinarity in Policy and Planning	9
II. Historical Humanities in Communities: Expanding the Knowledge Base	12
Expanding Archives for COVID-19: An Example	14
III. The Humanities and the Healthcare Sector: Getting Out of Our Silos	15
References	19

Executive Summary

COVID-19 was a stark reminder that understanding a novel pathogen is essential but insufficient to protect us from disease. Biomedical and technical solutions are necessary, but they do not prevent or resolve misinformation, vaccine hesitancy, or resistance to public health measures, nor are they sufficient to advance the development of more equitable and effective healthcare systems.

Responding to crises such as pandemics requires deep collaboration drawing on multiple methodologies and perspectives. Along with the science, it is imperative to understand cultures, values, languages, histories, and other determinants of human behaviour. In this policy briefing we argue that the Humanities – a group of methodologically diverse fields, including interdisciplinary studies that overlap significantly with the social determinants of health – are an underused source of cultural and social insight that is increasingly important and could be better leveraged in such collaboration.

Humanities disciplines approach health and illness as part of the human condition. Their historicized perspective could be more effectively mobilized to explore the social and cultural context in which science exists and evolves, in turn helping us understand the forces shaping perceptions, concerns, and assumptions. Literature, film studies, religion, history, language and other Humanities experts can increase the effectiveness and inclusiveness of policies, educational documents and communications materials, using tools to decode cultural meanings behind words and images, to analyze rhetoric and audience, and to develop nuanced messaging in various languages and cultural idioms.

Humanities scholars and practitioners can also create archives of information to support policy development, resource distribution, and even epidemiological advances. With new digital forms of communication and data collection enabling access to the views and experiences of a wide spectrum of the population, such archives could be transformative.

For decades, there have been calls for collaboration to increase Canada's capacity to better understand and act on the cultural and social determinants of health. The most recent of these is the *Report of the Advisory Panel on the Federal Research Support System*, which emphasizes the importance of multidisciplinary research to answer complex scientific questions and address priority areas and opportunities.

We therefore urge the inclusion of the Humanities – with its strong and well-established foundation of health-related scholarship – in this multidisciplinary work. To that end, we offer seven recommendations, addressed to federal and provincial governments, universities, and key agencies, that draw from Humanities research towards delivering more effective research, education, planning and policy.

These recommendations require neither significant new investment nor structural changes; rather, they aim to integrate Humanities expertise into existing conversations and initiatives, and to increase the capacity of the Humanities to contribute to the common aim of all health-related disciplines: the well-being of people and their communities.

Recommendations

- 1. Humanities expertise should be embedded into health-emergency planning at federal and provincial/territorial levels.
- 2. Research funders, including federal agencies, should promote research on the cultural and social determinants of health, the culture and history of public health, longitudinal social and health impacts of public health crises, and other under-addressed areas of health studies to increase graduate and post-doctoral training capacity as well as enhance the knowledge base across all health-related disciplines, including the Humanities and Social Sciences.
- 3. CIHR, SSHRC, and provincial funding agencies should collaborate on initiatives to support the archiving and analysis of the pandemic response, including social media, grassroots organizing, public health, creative expression, and individual experiences, to support a knowledge base that will facilitate effective responses to healthcare crises.
- 4. Accrediting bodies such as the Medical Council of Canada should require knowledge of the history and culture of infectious disease and public health in medical education.
- 5. CIHR's Health Systems Impact Fellowships should be matched by a parallel SSHRC program.
- 6. Universities should recognize public engagement by health-related faculty as valuable outreach, and promote health research across all disciplines, in support of social accountability. This should also include support and training.
- 7. PHAC, in partnership with the Tri-Agency, should establish an annual federal conference on a current theme in public health, with academics from all health disciplines including the Humanities, along with clinicians and policymakers, to support cross-sectoral knowledge exchange across provinces and territories.

Introduction

For decades now, there have been calls to increase capacity in Canada for multidisciplinary research and cross-sectoral collaborations to support health research, healthcare, and health outcomes. We can do better in understanding the cultural and social determinants of health and healthcare access, enabling forecasting and preparations for emergencies such as pandemics, and improving healthcare training and healthcare systems. We can also do better in understanding the cultural forces that have shaped our institutions, policies, and even communications in ways that perpetuate the forces of inequality and mis- and under-representation. Because "One tenet within humanities scholarship is that forms of human knowledge are not 'found' but created" (Hassan and Howell, 2022), the Humanities can disrupt familiar ways of thinking about things, and so help us break free of biases and assumptions that inhibit effective innovation. Yet the Humanities continue to be an under-used resource in such vitally important work. Both the research and health ecosystems lack pathways to connect Humanities expertise, evidence, and methodologies with health research and healthcare needs—pathways especially critical to health system and societal emergency responses, as we have seen over the last three and a half years.

The COVID-19 pandemic highlighted the need to expand these pathways. Vaccination rates were not only negatively affected by language and technology barriers (Aylsworth et al. 2022), but also by vulnerable communities' historical experiences of state violence (e.g., Sullivan et al., 2023; Greenwood and MacDonald, 2021). Mask hesitancy is fuelled by political polarization, weariness, and misinformation, but also by other cultural factors, including the broader role of gender and racism in shaping the perception of masks and other public health interventions (e.g., Bucar, 2020; Christiani et al., 2022; Ng, 2020; Parmanand, 2022).

While the effects of social media have been dramatic and need further study, dismissing low take-up of health measures as the result of misinformation or intractability arguably echoes the tactics of disinformation (that is, suggesting that those who disagree "haven't done their research" or are "sheep"). It also reinforces a vision of public health as a matter of individual responsibility and failure. Questions of meaningful access, shaped by social, economic, and cultural context, are equally important. Low take-up of valuable health information is not just evident in individuals—it is also clear in our institutions. For example, we can do more to understand why past reports with detailed recommendations, such as the SARS Commission's Report (Campbell, 2006), had so little impact on Canadian health policy and decision-making in the years leading up to, and then during, the COVID-19 pandemic. We can better understand the very real cultural and historical forces at work in shaping perceptions, concerns, and assumptions about what is achievable, and worth achieving, from the streets to our legislatures. We can also think normatively about what we ought to be achieving.

A common word in coverage of the COVID-19 pandemic is "unprecedented" but much of it is not. The long historical view of Humanities disciplines can connect the present to the past to advance understanding and develop better forecasting. Pandemics have long been associated with misinformation, quack medicine, suspicion of (and even attacks on) medical professionals, and weariness of public health and safety measures, and this is visible in literature across time as well as in the historical record (e.g., Cameron, 2021). Conspiracy theories and vaccine hesitancy date back centuries. While scientific knowledge has evolved historically, social and cultural responses share some common themes over time. These are well-researched by Humanities scholarship, including work in the history and philosophy of science. Such knowledge should

be more effectively mobilized, recognizing that science exists in social and cultural context, and should not alone bear the burden of health crisis responses. In the meantime, the people-centered focus of the Humanities—languages, cultural works, oral histories, traditions, and local histories

of community building and other institutional structures—creates a more nuanced picture of those that the healthcare system and researchers are seeking to better serve through patient- and community-centered approaches, as well as more global thinking (e.g., Hassan and Howell, 2022).

Recognizing the value of the Humanities to developing better solutions is not new. In 2005, the Canadian Institutes of Health Research (CIHR), in collaboration with the Social Sciences and Humanities Research Council (SSHRC), produced a lengthy report, The Social Sciences and Humanities in Health Research: A Canadian Snapshot of Fields of Study and Innovative Approaches to Understanding and Addressing Health Issues. It mostly took an encyclopedic approach, listing dozens of Social Sciences and Humanities (SSH) "disciplines and interdisciplinary fields," with "an introduction to the area, its work as it relates to health, and examples of research" for each (CIHR, 2005, p. 18). The report begins,

The Humanities and Academic Disciplines

The grouping of academic disciplines is imperfect because of cross-fertilizations between them (particularly in professional programs such as Nursing), but broadly speaking the Humanities include such disciplines as Art History, Classics, Film Studies, History, Languages, Literatures, Music, Philosophy, and Religious Studiesroughly, what people have created over time as art, belief and ethical systems, and expressions about themselves, others, and the world (collectively termed "culture") rather than patterns of human behaviour (addressed by Social Sciences such as Economics, Geography, Psychology, and Sociology) or the realm of the physical (the focus of the Sciences).

This is a very exciting time for health research in Canada. It is a time for bold new adventures for health researchers and for finding resources and connections in new types of collaborations and partnerships. There is a growing recognition that trans-disciplinary health research has excellent potential to provide important understandings about health and health service. It is a time for expanding our notions of scientific and research excellence. The concepts of "scientific breakthrough" and "discovery" are being redefined to include cultural contexts, social understandings and innovations (CIHR, 2005, p. 2).

In 2016, the Federation of the Humanities and Social Sciences wrote in its submission to Canada's Fundamental Science Review, "There is a growing international understanding that underlying social conditions have a significant effect on population health outcomes. However, Canadian researchers wishing to use [SSH] research methods for a health-related project have struggled to find funding support commensurate with the importance of their work" (Federation, 2016, p. 10).

There was some progress in the wake of the Fundamental Science Review's call for "more nimble support of multidisciplinary research" (Naylor et al., 2017). The Canada Research Coordinating Committee was created; a new program for large multidisciplinary projects, the New Frontiers in Research Fund, was established; and the Tri-Agency created a pilot program for "Interdisciplinary Peer Review" of applications that bridge the domains of the research councils, and have extended

it twice (SSHRC, 2023). While these and other steps do offer progress, high-level structural changes and pilot programs are insufficient for Canada to catch up on developing research capacity and innovative programming that can support better health outcomes in a more evidence-informed healthcare system.

The recent Report of the Advisory Panel on the Federal Research Support System establishes important "Guiding Principles" that are vital to Canada's research ecosystem (Bouchard et al., 2023, pp. 19-21) that we echo here, including "Build on previous advice" and "Adopt an ecosystem approach." Like earlier reports and ours, the Advisory Panel's Report emphasizes "a growing need to support multi- and interdisciplinary research to answer complex scientific questions and address key priority areas and opportunities" (Bouchard et al., 2023, p. 14). There is broad, continuing consensus on what needs to be done, and we must wait to see if the federal government will take further action as it "carefully consider[s]" the Advisory Panel's Report (Canada, 2023, p. 110). Unlike other reports, several of our recommendations here do not require significant new investment or structural changes—they primarily aim at nurturing productive cultural change by more intentionally bringing Humanities expertise into the conversations that are crucial to Canadians' health and well-being, from training and research to policy development and decision-making.

For instance, instead of a general requirement to include the Humanities in multidisciplinary projects, too often superficially addressed in Canada by nodding to the Humanities for communications help, there should be a concerted effort to include Humanities' content expertise in the design of health research projects, healthcare initiatives and policy. To take one example: studies of maternal outcomes could draw more extensively on such topics as the diversity of cultural understandings of gender and reproduction, including in popular culture (e.g., Wlodarczyk, 2013).

We already have a strong foundation on which to move forward: Humanities researchers have been working in health-related areas for decades. In 2005, the CIHR report could already look back on a substantial body of scholarly activity to connect the Humanities and Health, including peer-reviewed journals, scholarly associations, and academic programs. In Canada, there was a "Colloquium on Health at the 1998 Congress of the Social Sciences and Humanities, which featured sessions by 15 different scholarly associations" as well as numerous other initiatives (Stone, 2005, p. 10). Such academic activity has expanded even further in this century. Now, hundreds of scholars in Canada, including graduate students, are working under the headings of Medical Humanities, Health Humanities, the History and Philosophy of Medicine and Science, and so on, publishing research and teaching courses at these intersections. Scholars continue to urge connections between the Humanities and health policy and practice (e.g., Clarke, Ghiara, and Russo, 2019; Bhattacharya, Medcalf, and Ahmed, 2020).

The rise of convergence research also urges us to think more fluidly. Convergence research proceeds from the premise that solving major problems requires cross-disciplinary collaborations that bring multiple methodologies and knowledge-based perspectives to bear. In medicine, for example, recent calls to address the methodological limitations of evidence-based medicine (EBM) with EBM+ (Greenhalgh et al., 2022) adds to the growing sense that disciplinary silos are inhibiting not just "innovation" but also, and more fundamentally, the intellectual openness, flexibility, and breadth that can help to solve intractable old problems, such as structural racism and economic inequality, or to respond quickly to emergencies, such as the COVID-19 pandemic. The Humanities are a largely untapped reservoir of much-needed social and cultural insight that can support rapid response and even anticipate problems. There was significant scholarship on misinformation and

social media before 2020 (see Wright et al., 2022, pp. 10-11). Misinformation during pandemics is well documented historically, including in such works as Daniel Defoe's *Journal of the Plague Year* (1722). Poor public health communication and mistrust of physicians led to riots during the 1832 cholera outbreak in Liverpool (Gill, Burrell, and Brown, 2001). Two centuries ago, in a book on what we call misinformation and related phenomena, Charles Mackay suggested of "seasons of great pestilence" that "Credulity is always greatest in times of calamity" (Mackay, 1841, p. 268). We could have been, and still could be, better prepared to meet that challenge for COVID-19.

Our focus here is on building better pathways through some readily implemented program and policy changes. Our recommendations are not exhaustive or comprehensive, but aim to support more effective research, education, planning, and policy in ways that can be effectively implemented quickly. As we collectively consider other calls to better coordinate and manage healthcare in Canada, the Humanities can help us keep the focus of all health-related disciplines in mind: the well-being of people and their communities.

I. The Value of Health Humanities in Health Crises: Multidisciplinarity in Policy and Planning

In the Humanities, the past is always current because contemporary culture and society include the materials of the past and build upon it, as when a film invokes ancient myths or adapts an eighteenth-century novel or represents a historical event or way of life. Historical evidence, vital for itself, is also key to broader Humanities perspectives. Libraries, archives, art galleries, and museums, as well as private collections, have long ensured the survival of past societies and cultures into our present, and the internet has expanded this access. The Humanities archive is accretive: a Physics textbook that falls out of date because of advances in knowledge becomes part of the history of science. Methodological versatility has contributed over the last half century to interdisciplinary Humanities work in such areas as Cultural Studies, Gender Studies, Disability Studies, Critical Race Studies, Indigenous Studies, and Digital Humanities, all of which intersect with Health studies' concerns—the social determinants of health, representational barriers, and effective communications. These areas of study are also future-oriented in their re-visioning of societies and social and institutional arrangements that are more just.

Humanities scholarship often draws temporal arcs from past to present to future. Histories may ground normative arguments and prescriptions, presenting imagined futures that avoid past failings or better address the material and non-material needs of individual and communities. These temporal arcs in the Health Humanities situate health and illness as inextricable parts of the human condition, and the experience of health and illness are thereby saturated with cultural meanings that outstrip any bioscientific and technological advancements. Better forecasting public responses to health emergencies requires thinking beyond our current technological moment to consider the cultural, moral, and experiential continuities that inform institutional as well as individual responses.

Before the twentieth century, broad Humanities training was a common foundation for educated elites (Stone, 2005, p. 8). British and Canadian history alone gives us a long list of artists, especially authors, with medical training, from the poets Erasmus Darwin and John Keats to the medical and

^{1.} This is a common refrain in policy briefings produced by the RSC Task Force on COVID-19 (e.g., Gibney et al., 2022; Tomblin Murphy, Sampalli, et al., 2022; Rabeneck et al., 2023).

detective-fiction writer Arthur Conan Doyle and the sculptor Robert Tait McKenzie. Secondary education became significantly diversified in the twentieth century, so that literature and history now share timetable space with courses from the sciences and skills-based subjects, and post-secondary education has become even more specialized for many students. But the Humanities have become more, not less, relevant to medical education, and far beyond the use of "Medical Humanities" to promote the cultural and historical awareness that informs sympathy. For about half a century now, Humanities scholarship has been examining questions relevant to the social determinants of health, including sexism, racism, ageism, ableism, and to cultural diversity, including language and language-use, religion, and histories that shape present attitudes towards institutional authority, health, and care.

Literary and historical scholarship took up medical topics more concertedly after the emergence of HIV/AIDS (see, e.g., Crook and Guiton, 1986; Gilman, 1987; Sontag, 1989; Fisch, 1993) and ground-breaking scholarship by historians of medicine such as Roy Porter (1986; and Greenshaw, 1989; and Dorothy Porter, 1989; 1992). This has supported the rise of Disability Studies, Body and Embodiment Studies, and Pandemic Studies. This scholarship recognizes that culture, power, and inequality saturate the discursive field, shaping how we talk about health, evidence, and policy through rhetoric and narrative (see, e.g., White, 1984) as historically informed choices that have significant cultural and political resonances. Humanities scholars thus have relevant methodologies for analyzing the discourses of science, policy, documentary records, and so on, as well as artistic works. These methodologies also support competencies in education, including greater sensitivity to marginalization and stronger communication and collaborative skillsets (see, e.g., Langlois and Peterkin, 2019; Singh et al., 2022). And, as this short history of Humanities and health has briefly traced, the Humanities allow us to map out the complexity of cultural, social, and political forces that shape our present and can reshape our future.

Humanities scholarship is useful to policy actors because "questions about what it is to be healthy, to suffer disease or disability, and the presentation and acceptance of solutions are interwoven in culturally and historically complex webs of meaning" (Bhattacharya, Medcalf, and Ahmed, 2020). In dealing with the current landscape of infectious disease crises, biomedical and technical solutions are necessary, but not sufficient especially since decision-making is shaped by cultural and material forces at individual, community, and governmental levels. Internet access is still limited for many Canadians. Finding credible sources is not always a straightforward task, given not just the vastness of the internet but also search-tool biases. Credibility itself is a standard shaped by faith, knowledge, and experience. As we saw in the past with resistance to compulsory smallpox vaccination in the nineteenth century, or to tuberculosis (BCG) vaccination in the mid-twentieth century, in today's world such factors as trust and social cohesion shape disease containment as much as scientific knowledge (Goldenberg, 2021). This is one of the areas where multidisciplinary collaborations with Humanities experts can support developing more democratized and inclusive ways to put knowledge to work across barriers of inequity and marginalization.

Cultural materials and the analytical methods used to understand them can provide important context for anticipating and responding to real-world concerns. Infectious disease, for instance, is as old as recorded human history, and social and cultural histories of epidemic and endemic disease across the span of that history point to common human responses to disease crises, including infodemics, public skepticism, and the urge to find a single responsible cause (often targeting a marginalized population by falsely holding them responsible) and a single straightforward

solution. Social history can help us to understand the situatedness and specificity of individual and community beliefs, and the ways in which the past can inform collective reactions to outbreaks. As William Preston remarked, "What is history but a collection of experiments in human conduct?" (1803, p. 47). But historical evidence must also be interpreted with care.

Anti-Asian racism in the wake of COVID-19 may resonate tragically with anti-Jewish racism during outbreaks of the bubonic plague in medieval Europe, but the specific cultural forces at work and even the forms of violence differ in significant ways: we can learn from the medieval example, but cannot simply map one onto the other. Turning to the Great Influenza Pandemic of 1918 in 2020 as the closest analogue for COVID-19 not only missed key nuances but also gave traction to the reassuring narrative that contagious diseases evolve to become more benign and so come to a clear and safe end. Enlightenment narratives of progress—a philosophical position that emerged in early eighteenth-century Europe, in which societies are assumed to improve, inexorably, both politically and technologically—also fed expectations that we were too advanced to fall prey to contagious diseases and that vaccines alone would prevent major outbreaks. Vaccines are invaluable but not alone sufficient. Highly effective polio vaccines, for example, have been available from the mid-1950s, yet polio outbreaks continue to threaten public health. Humanities expertise provides a more complex understanding of past experiences, including lesser-known human responses to crises and the specific cultural trends that can have large effects, such as the centuries-old tendency to "subsume loss and death into a neat narrative of healing and survival" (Wasson, 2010, p. 28). If we are less surprised, then we can be better prepared. Public discourse has registered this insight, but too sporadically and unevenly for a consistent inclusion of Humanities perspectives, which can help enhance effective forecasting in emergency responses.

Humanities modes of analysis can assess a wide range of materials, including educational documents, policies, and communications for clarity and biases, such as sexism. "A rhetorical approach treats language as a social act, and attends to the role of language in establishing professional identities and relationships" (Lingard, 2007). Politeness theory, which understands the way that rhetoric shifts in relation to power because of historically informed codes and conventions of language use, has been used to understand the workplace culture at NASA and how it led to the Challenger disaster (Moore, 1992), for instance, and can contribute to discussions of other workplace cultures as well as public messaging. Literature, film studies, and languages experts can all support robust analysis of communications materials to advance their effectiveness and inclusiveness by drawing on tools for understanding the cultural baggage that accompanies words and images, for analyzing rhetoric and audience, and for ensuring nuanced communications in various languages and cultural idioms. Cultural idioms can vary not only between religious and language groups but also even within families because of social circles, reading and viewing choices, work culture, social media use, personal taste, and so on.

Emergencies require rapid action based on robust, comprehensive, and current information. COVID-19 has shown us that understanding a pathogen is essential but insufficient to protect us. It is also imperative to understand cultures, values, languages, histories, and other determinants of human perceptions and behaviour to effectively coordinate public responses as well as better provide the supports required in the healthcare system.

Recommendation 1. Humanities expertise should be embedded into health-emergency planning at federal and provincial/territorial levels.

In the US, former Chief Medical Advisor Anthony Fauci and Senior Scientific Advisor David Morens have argued that "we have entered a pandemic era" (Morens and Fauci, 2020). In the northern transatlantic of the eighteenth and nineteenth centuries, various contagious diseases were devastating, including typhus, yellow fever, and cholera. The invention of public health in Britain can be traced back to this era and the recognition of the role of inequality in the spread of disease (Morley, 2007). Edwin Chadwick, key to this development, also called for public health solutions from various disciplines, including "officers" to oversee "public works" who are qualified as "civil engineers" and "a district medical officer," and for consistency and coordination in the terms, structures, and practices of public health (Chadwick, 1842, p. 371, 372). The same principles are emerging in relation to COVID-19, including calls for improved ventilation standards and greater public health coordination in Canada (Ontario Society of Professional Engineers, 2021; Bubela et al., 2023). "Everything old is new again," as the phrase goes. If Fauci and Morens are correct that we are in another pandemic era, then we can learn from past successes as well as mistakes to better prepare for a future where global pandemics may occur more frequently.

Unfortunately, we have a habit of forgetting pandemics in an effort to move past them. The 1918 Flu pandemic is dubbed "the forgotten pandemic" and historians of medicine have suggested that there is a longer tradition of treating pandemics as episodic disruptions from an otherwise normal trajectory (Jones et al., 2021; Crosby, 2003). The 2006 SARS Commission report appears to have had little impact on our readiness, as commentators continue to note (Miller, 2020; Bubela et al., 2023). Efforts to move past pandemics, to "return to normal," contribute to these acts of forgetting—and so make it more difficult to access past insights. It is the work of the Humanities to remember the past and apply knowledge from it.

As Canada works on strengthening healthcare, it is crucial that the research ecosystem intentionally recognize the disciplinary gaps in health studies created by the conventionally siloed approach of the Tri-Agency. We are not suggesting new funding, but a new emphasis on a concertedly multi-and interdisciplinary approach that can yield new insights as well as support enhanced training of health researchers in the near-term. As an area of research enquiry, cultural and social history, for instance, can draw upon documentary archives, material objects, oral histories, philosophical analysis, artistic works and recordings and other existing evidence. By including graduate students and early career researchers, Humanities scholarship can quickly scale up. This kind of research is not high-cost, but it can be high-return as well as broadly applied.

Recommendation 2. Research funders, including federal agencies, should promote research on the cultural and social determinants of health, the culture and history of public health, longitudinal social and health impacts of public health crises, and other underaddressed areas of health studies to increase graduate and post-doctoral training capacity, as well as enhance the knowledge base across all health-related disciplines, including the Humanities and Social Sciences.

II. Historical Humanities in Communities: Expanding the Knowledge Base

In addition to drawing on Humanities tools, we can also build on Humanities knowledge to create more useful archives of information to support better policy development, resource distribution, and even potentially epidemiological advances. While social media has played a significant role in perceptions of the COVID-19 pandemic as "unprecedented," a role that is itself unprecedented, we should also recognize that there has been another significant change that could shape pandemic responses for the better: we now have a remarkable capacity for collecting, storing, sharing, and searching massive amounts of information, from cheaply digitizing audio files to using data science (such as machine learning and artificial intelligence) to uncover patterns in that information. Digital forms of communication and data collection now allow access to the views and experiences of a wide spectrum of the population. This has the potential to be transformative—if the information is preserved.

COVID-19 has highlighted existing gaps in our public health infrastructure, exacerbated shortcomings in our social safety net, and revealed new challenges of misinformation spread through social media platforms. Indeed, disastrous events have frequently revealed shortcomings in infrastructure while exacerbating inequalities, and COVID-19 is no exception. Activists and scholars have attempted to record these experiences, both for the lessons that can be gleaned from archiving disasters, and to aid in the process of grieving and rebuilding that occurs through the process of memorializing a moment. Local initiatives have documented "disaster responses" that include public memorialization to remember events such as Hurricane Katrina in 2005 and the 9/11 attacks in 2001 (Cohen and Rosenzweig, 2005); for a specific example, see the text box below.

Remembering and rebuilding from COVID-19 moves beyond a geographical focal point, but will necessarily engage local communities in first witnessing and then processing the impact of the epidemic. These initiatives to remember, document, understand, and publicize the varied social experiences of disaster events can draw on the methods and materials of the Humanities. Remembering COVID-19, however, given the exponential increase in information available across a broader spectrum of society, will require new theoretical and methodological approaches that capture and preserve the experience for future generations. The materials included in these archives might range from government documents to oral interviews with policy leaders as well as marginalized populations, along with social media content and forms of art including poetry and photography. This will invite a wide variety of Humanities researchers to engage in archival scholarship, building on Humanities expertise to expand our historical vision to inform a more comprehensive understanding of long-term effects and everyday social responses to the pandemic.

The COVID pandemic presents challenges for memorializing not only because of the breadth of information available but also because the diversity of perspectives means that there is no consensus on how to remember the event, or even agreement on its veracity or authenticity as a disaster. Front-line workers have expressed excessive burn out and mental health needs (e.g., Tomblin Murphy, Sampalli, et al., 2022); remembering or even simply describing the day-to-day experiences of working in the healthcare system during this prolonged pandemic is difficult and even raises ethical questions about how researchers should approach healthcare workers. The differential impacts of COVID-19 have revealed vast variances in social experience, meaning that efforts to memorialize or draw lessons from the pandemic need to pay close attention to local conditions, alongside a wide variety of intersectional experiences: age, housing and food security, income, domestic care giving responsibilities, mental health needs, access to updated public health information, and so on. Future attempts to accurately describe the actual and perceived

experience of this moment run the risk of falling short or being rendered irrelevant for future pandemics or even in comparisons from one group to the next.

Some crucial work is already being done. A consortium of researchers and institutions across Canada has created a set of archival resources and training opportunities for Digital Humanities scholars. They began in 2017, dedicated to improving existing archival web infrastructure; in 2020, with more support from the Andrew W. Mellon Foundation, they broadened to offer training programs as well. This phase coincided with the global pandemic and has served to support several groups in Canada and internationally who have been developing specific collections related to digital materials created during the pandemic. For example, Archives Unleashed helped Brock University launch Crisis Communication in Niagara to collect digital communications about the pandemic and preserve these documents for future pandemic planning. It focuses on the Niagara region, incorporating local news, reports, and decisions affecting public health policies in the area. Some local public libraries across Canada also initiated smaller-scale projects, collecting photographs and voluntary submissions from community members interested in sharing personal reflections on the pandemic (see, e.g., Saskatoon Public Library).

The RSC's Task Force on COVID-19 has also contributed to this work through "Engaging Creativities: Art in the Pandemic" and similar projects have been created around the world. The investigation and archiving of new media and artistic forms is adding to our understanding of the public response and public health options, and in a global perspective (e.g., "COVID-19 Street Art Archive"; Aikins and Akoi-Jackson, 2020; Peters, 2021). Such examples illustrate not only the potential of new technologies to significantly expand the knowledge base available to researchers, policymakers, and the public, but also the power of those technologies to include a wider range of voices in the shaping of such archives as well as in their contents and so supporting equity and inclusion goals (see, e.g., Mubareka et al., 2022, recommendation 9). Humanities tools for analyzing culture will be key to understanding these responses.

Expanding Archives for COVID-19: An Example

In June 2020, a group of faculty members from History, the Library, and Archives at the University of Saskatchewan coordinated a public archive project for the Province of Saskatchewan (https://rememberrebuild.ca/),² later expanding to form partnerships with scholars in Health Sciences and the Saskatchewan Population Health Evaluation and Research Unit. They identified over 50 community groups and organizations willing to co-produce materials for a more targeted and comprehensive archive using Digital Humanities methodologies, oral histories, and community-engaged practices. The research team captured perspectives from vaccine scientists, ICU doctors and nurses, front-line workers, employees at the safe injection site and foodbanks, justice-involved individuals, and other marginalized residents.

The archive included an open portal that allows anyone to upload materials to the site, including photographs, artwork, songs, or videos. It systematically collected posts from social media (including Facebook and Twitter) and digital platforms that included fragments of responses

^{2.} One of the authors of this RSC policy brief, Dr. Erika Dyck, is an investigator on this project. Dr. Dyck acknowledges the contributions of her partners and collaborators. They include Jim Clifford, Nazeem Muhajarine, Craig Harkema, and Patrick Chassé. For more, see Muhajarine (2023).

to the pandemic. The research team brought methodological approaches from epidemiology, public health, disaster anthropology, history of medicine, and the sociology of heath, along with a shared commitment to community-engaged research to build and share a record of COVID-19 in Saskatchewan.

COVID-19 is the first global event of this scale since the widespread adoption of digital social media. A cross-section of society engaged with social media platforms to stimulate debate about public health policy as the daily case counts and deaths were posted online, creating immediate opportunities to share information, experiences, reactions, emotional responses, denial, and outpourings of grief and anger. Historians have never had access to such a broad range of perspectives from a diverse set of people with differing roles and responsibilities in the public discourse.

This project still faces limits, however. Digital artifacts are hosted on proprietary platforms, making it difficult to properly archive such materials, and the scale of the public engagement creates new challenges. Moreover, with many people working remotely and online, it is no longer as common to generate a traditional paper trail that records conversations and decision-making. Historians and archivists are consequently raising serious concerns that COVID-19 will be the "21st century's forgotten pandemic" not merely because of short public memory (discussed earlier) but also because the enormous potential of online archiving comes with new methodological challenges for historical research (Jones et al., 2021).

Despite the challenges, the need to remember COVID-19 is critical. Pandemic archiving fulfills at least two distinct objectives: first, to create foundational knowledge for future pandemic preparations; and second, to bring communities together in an act of rebuilding our social infrastructure in the wake of this prolonged crisis. Digital media offer new tools for scaling up the development of such resources in support of a more nuanced and comprehensive investigation of the pandemic experience to provide a better knowledge base for public health responses to future health emergencies and pandemics.

Recommendation 3. CIHR, SSHRC, and provincial funding agencies should collaborate on initiatives to support the archiving and analysis of the pandemic response, including social media, grassroots organizing, public health, creative expression, and individual experiences, to support a knowledge base that will facilitate effective responses to healthcare crises.³

III. The Humanities and the Healthcare Sector: Getting Out of Our Silos

As Canada rethinks its healthcare systems to better retain and support healthcare workers—as well as foster and promote quality patient- and family-centred care—it would benefit from including analysis of healthcare as a social space where historically informed rhetorical and philosophical analyses can trace barriers to inclusion, including persistent stereotypes and structural colonial

^{3.} For more on archiving and the pandemic, see Jones et al. (2021).

paradigms. We are already familiar with drawing on Humanities principles to push back against images that depict only white men in white coats, but a more nuanced and inclusive analysis would also examine the ways that the language in policies and communications embed, for instance, assumptions about family structures, language, age, and sexuality as well as gender and ethnicity. If bias against older people can be evident in healthcare workers "as early as . . . training" (Ben-Harush et al., 2017), then the wider culture is a significant contributor to the problem of healthcare biases. Consider, for example, cinematic representations that "try to construct a common social identity for older people and try to imagine as universal not just the fact but also the manner of aging" (Chivers, 2011, p. xviii); or the gendering of aging, from using "distinguished" only for men to representation of women's aging as illness in still-influential nineteenth-century British novels (Zadrozny, 2019).

The Humanities' attention to context, complexity and diversity can help to support open debate and honest discussion of how health research and programs have been shaped, often over centuries, by broader forces of inequality and thus help to improve policy, strengthen EDI work on reducing barriers, and support better outcomes for all (e.g., Haddon et al., 2015; Holbrook and Lowe, 2021; Mubareka et al., 2022). In the Canadian case, historical and Indigenous knowledge of colonialism and health—if fully recognized—can play a role in fostering integrity and trust in relationships between public health and its clients. Research on how and why individuals and communities negotiated and resisted public health in the past may illuminate discussions of present-day vaccine hesitancy by explaining the historical impact of social relations of power, inequality, and unequal access to health care. The COVID-19 pandemic has also laid bare the ways in which the historical mistreatment of BIPOC communities in health care and other institutional systems has contributed to vaccine hesitancy and mistrust in the healthcare system. A history of unethical medical and scientific experimentation has long fed fears of medical treatment. A large body of cultural materials have reflected those fears and so maintained them in the public eye. Humanities research can be of service to public health practitioners and policy developers because of the field's emphasis on deep social, political, and cultural context, the importance of "patient" and community histories, close attention to the processes, successes, and failures of past decision-making, and how the past flows into and shapes the present (e.g., Hinchliffe et al., 2018).

The role of the Humanities in various critical interdisciplinary "studies"—Gender Studies, Disability Studies, Critical Race Studies—speaks to the importance of history, culture, and language as both the context for, and the medium of, the representation of historically marginalized groups. "Historically" here needs to be understood not only as the pastness of the marginalization but also as the methodological frames through which we can understand the ways in which the ongoing effects of that marginalization are sustained. Physicians, nurses, public health, and other healthcare professionals who have a nuanced awareness of these cultural and social histories through current Humanities scholarship would be better positioned to address the concerns raised by the communities that they serve and support inclusion in the healthcare workforce as well (see Tomblin Murphy, Sampalli, et al., 2022). By expanding definitions of the "determinants of health" to consider these and other cultural factors investigated by the Humanities (including

language, religion and ethics, media, gender norms, and community history), healthcare today can potentially improve trust, access, and informed health-related choices.

Recommendation 4. Accrediting bodies such as the Medical Council of Canada should require knowledge of the history and culture of infectious disease and public health in medical education.

There are straightforward ways we can both integrate Humanities expertise and increase capacity in healthcare and health policy to include these other disciplinary perspectives. For instance, the Health System Impact Fellowship Program under CIHR has been embedding doctoral and postdoctoral researchers in non-academic health organizations "to apply their research and analytic talents to critical challenges in health system and related organizations" (CIHR, 2017). SSHRC could establish a similar program, helping to train Humanities scholars as well in policy development and "how the health system and related organizations work" (CIHR, 2017), creating better pathways for including that expertise. Such a SSHRC program would have enormous benefits, like the CIHR program, in promoting knowledge transfer from the research sector to the health system and the further training of early career researchers. For instance, recent studies and even legislation point to growing concern about conflict and violence in healthcare settings that is affecting both the quality of patient care and the well-being and retention of healthcare professionals. SSHRC Fellows could bring into healthcare settings expertise sensitive to the nuances of language and effective strategies for de-escalating tensions and transforming workplace culture through communications, policy, and other discursive strategies (see, e.g., Ely and Meyerson, 2010), addressing significant concerns that have been raised in relation to nursing, including "workplace violence" (Tomblin Murphy, Sampalli, et al., 2022).

Recommendation 5. CIHR's Health Systems Impact Fellowships should be matched by a parallel SSHRC program.

Greater attention to cross-cultural understanding, culturally safe and appropriate communications, disinformation-stoked fears, and historically produced concerns about structural racism, misogyny, and other biases can all support more effective public and patient engagement and strategies for better communication and the de-escalation of tensions. We can also be better prepared to mitigate the risks attached to public engagement (see Wright et al., 2022). We can make healthcare workers safer and healthcare settings more welcoming to patients and their families by attending to the broader social and cultural forces at work, to their individual and collective experiences of health care, as well as to their past struggles and activism to achieve greater equity.

To support this work, the Humanities can inform policy via direct advice to government departments, agencies, and political decision makers; media (broadly defined) use of policy-relevant historical perspectives; or through working with local partners to highlight community health needs. Humanities research can provide support to public advocacy and activism. Humanities scholars can also mobilize their knowledge directly through social media, and digital projects such as websites, blogs, video, and podcasts. Integrating Humanities into more broadly interdisciplinary

approaches to evidence, planning, and policymaking requires a more sustained strategic approach, across sectors.

Recommendation 6. Universities should recognize public engagement and outreach by health-related faculty as valuable, and promote health research across all disciplines, in support of social accountability. This should also include support and training.⁴

In general, one of the key lessons of the COVID-19 pandemic is the need for greater cooperation, coordination, and information sharing, including better memory and engagement with reports on past failures. The first policy briefing released by the Royal Society of Canada's Task Force on COVID-19, Restoring Trust: COVID-19 and the Future of Long-Term Care, began by noting "For 50 years, Canada and many other countries have generated inquiries, panels, task forces, commissioned reports, media reporting and clarion calls for action . . . We have ample sound evidence" (Estabrooks, et al., 2020, p. 5). Over and over, RSC Task Force policy briefings had made largely the same point: we have the data and the expertise to solve a problem, but action is wanting. This policy briefing is no different. Experts need to talk to each other, across the divide among clinicians, policymakers, and different academic disciplines and scholarly organizations, to talk about evidence-based solutions and regular assessments of existing tools. As the pandemic has made clear, better coordination built on more effective knowledge exchange is critical to public confidence in Canada's public health (see Bubela et al., 2023).

Recommendation 7. PHAC, in partnership with the Tri-Agency, should establish an annual federal conference on public health with academics from all health disciplines, including the Humanities, along with clinicians and policymakers, to support cross-sectoral knowledge exchange across provinces and territories.

The Humanities are, in a fundamental sense, the study of our collective memories and values. Social history, literature, music, film, the history and philosophy of science and medicine—such terms grasp the kinds of shared experiences and meanings that human beings co-create. We cannot change the gravitational constant or our need for our hearts to beat; however, we have regularly changed the way that we live with each other to be healthier, safer, and even happier. In this briefing, we have cited only a small handful of examples from a substantial body of Humanities scholarship and expertise that is already available to improve the health, and lives, of Canadians. Despite numerous calls for drawing on this knowledge in health research, however, it remains underused. One of the lessons of COVID-19 is the need to reignite the conversation about integrating the Humanities better into health research and health systems, including Humanities knowledge of our values and our pasts, understanding of the cultural forces that maintain inequities, and ability to analyze how we discuss and understand health. The Humanities teach us that we have agency in our world, including a capacity to learn from the past and reinterpret our present to build a better future.

4.	On support and	training, see	e also	Wright et al.	(2022).

References

- Aikins, Ama de-Graft, and Bernard Akoi-Jackson. 2020. "'Colonial Virus': COVID-19, Creative Arts and Public Health Communication in Ghana." *Ghana Medical Journal* vol. 54, pp. 86-96. https://www.ajol.info/index.php/gmj/article/view/202995.
- Archives Unleashed. https://archivesunleashed.org/
- Aylsworth, Laura, Terra Manca, Eve Dubé, Fabienne Labbé, S. Michelle Driedger, Karen Benzies, Noni MacDonald, Janice Graham, and Shannon E. MacDonald. 2022. "A Qualitative Investigation of Facilitators and Barriers to Accessing COVID-19 Vaccines Among Racialized and Indigenous Peoples in Canada." *Human Vaccines and Immunotherapeutics*, vol. 18, no. 6. https://doi.org/10.1080/21645515.2022.2129827
- Ben-Harush, Aya, et al. 2017. "Ageism Among Physicians, Nurses, and Social Workers: Findings from a Qualitative Study." European Journal of Ageing, vol. 14, no. 1, pp. 39-48. 10.1007/s10433-016-0389-9
- Bhattacharya, Sanjoy, Alexander Medcalf, and Aliko Ahmed. 2020. "Humanities, Criticality and Transparency: Global Health Histories and the Foundations of Inter-Sectoral Partnerships for the Democratisation of Knowledge." *Humanities and Social Sciences Communications* vol. 7, no. 1 (June 17, 2020): 1–11. https://doi.org/10.1057/s41599-020-0491-7.
- Bouchard, Frédéric, et al. 2023. Report of the Advisory Panel on the Federal Research Support System. Government of Canada. https://ised-isde.canada.ca/site/panel-federal-research-support/sites/default/files/attachments/2023/Advisory-Panel-Research-2023.pdf
- Bubela, Tania, Colleen M. Flood, Kimberlyn McGrail, Sharon E. Straus, and Sharmistha Mishra. 2023. "How Canada's Decentralised COVID-19 Response Affected Public Health Data and Decision Making." *BMJ* vol. 382, https://doi.org/10.1136/bmj-2023-075665.
- Bucar, Liz. 2020. "Islamophobia and Americans' Problems with Face Masks." The Revealer https://therevealer.org/islamophobia-and-americans-problems-with-face-masks/
- Cameron, Derek. 2021. "Imagine the Perfect Vaccine": Homeopathic Vaccine Alternatives and Vaccine Discourse in English Canada. Canadian Bulletin of Medical History vol 38, no.1, pp. 32-62.
- Campbell, Archie. 2006. *Spring of Fear.* Final Report of the SARS Commission. http://www.archives.gov.on.ca/en/e_records/sars/report/
- Canada, Government of. 2023. Budget 2023. https://www.budget.canada.ca/2023/pdf/budget-2023-en.pdf
- Canadian Institutes of Health Research (CIHR). 2005. The Social Sciences and Humanities in Health Research. https://publications.gc.ca/collections/collection_2007/cihr-irsc/MR21-58-2005E.pdf.
- ---. 2017. Health Systems Impact Fellowships. Backgrounder. https://www.canada.ca/en/institutes-health-research/news/2017/10/health_systems_impactfellowships.html
- Chadwick, Edwin. 1842. Report to Her Majesty's Principal Secretary of State for the Home Department from the Poor Law Commissioners, on an Inquiry into the sanitary condition of the labouring population of Great Britain. London: Clowes and Sons. Digital copy at https://wellcomecollection.org/works/vgy8svyj/items?canvas=5.
- Chivers, Sally. 2011. The Silvering Screen. Univ of Toronto Press.
- Christiani, Leah, Christopher J. Clark, Steven Greene, Marc J. Hetherington, and Emily M. Wagner. 2022. "Masks and Racial Stereotypes in a Pandemic." *Journal of Race, Ethnicity, and Politics* vol. 7, no. 2, pp. 185-202, https://doi.org/10.1017/rep.2021.9
- Clarke, Brendan, Virginia Ghiara, and Federica Russo. 2019. "Time to Care: Why the Humanities and the Social Sciences Belong in the Science of Health." *BMJ Open* 2019;**9:**e030286. doi: 10.1136/bmjopen-2019-030286
- COVID-19 Street Art Archive. https://covid19streetart.omeka.net
- Crisis Communication in Niagara. https://brockdsl.github.io/archives_unleashed/
- Crook, Nora, and Derek Guiton. 1986. Shelley's Venomed Melody. Cambridge: Cambridge University Press.
- Ely, Robin J., and Debra E. Meyerson. 2010. "An Organizational Approach to Undoing Gender: The Unlikely Case of Offshore Oil Platforms." Research in Organizational Behaviour vol. 30, pp. 3-34, https://doi.org/10.1016/j.riob.2010.09.002.
- Engaging Creativities: Art in the Pandemic. 2021. Ottawa: Royal Society of Canada. https://rsc-src.ca/en/voices/covid-19-policy-briefing-recent/artistic-responses-to-covid-19/engaging-creativities-art-in
- Estabrooks, Carole (Chair), Pat Armstrong, Véronique Boscart, Gail Donner, Francine Ducharme, Colleen Flood, Janice Keefe, James Silvius, Sharon Straus, and Michael Wolfson. 2020. Restoring Trust: COVID-19 and the Future of Long-Term Care. Ottawa: Royal Society of Canada. https://rsc-src.ca/sites/default/files/LTC%20PB%20%2B%20ES_EN_0.pdf

- Federation for the Humanities and Social Sciences. 2016. *Grasping the Complexity of Things: Building a Federal Research System to Serve All Canadians*. Ottawa. https://www.federationhss.ca/sites/default/files/2021-07/federation_fundamental_science_review_submission_-oct_3_2016_-_final_-_en.pdf
- Fisch, Audrey A. 1993. "Plaguing Politics: AIDS, Deconstruction, and *The Last Man.*" *The Other Mary Shelley: Beyond Frankenstein*. Edited by Audrey A. Fisch, Anne K. Mellor, and Esther H. Schor. Oxford: Oxford University Press, pp. 267-86.
- Gibney, R. T. Noel, et al. 2022. COVID-19 Pandemic: The Impact on Canada's Intensive Care Units. Ottawa: Royal Society of Canada. https://rsc-src.ca/sites/default/files/ICU%20PB_EN_0.pdf
- Gill, Geoffrey, Sean Burrell, and Jody Brown. 2001. "Fear and Frustration—the Liverpool Cholera Riots of 1832." The Lancet, vol. 358, no. 9277. https://doi.org/10.1016/S0140-6736(01)05463-0.
- Gilman, Sander. 1987. "AIDS and Syphilis: The Iconography of Disease." October, vol. 43, pp. 87-107.
- Goldenberg, Maya J. 2021. Vaccine Hesitancy: Public Trust, Expertise and the War on Science. Pittsburgh: University of Pittsburgh Press.
- Greenhalgh Trisha, David Fisman, Danielle J. Cane, et al. 2022. "Adapt or die: how the pandemic made the shift from EBM to EBM+ more urgent." BMJ Evidence-Based Medicine. doi: 10.1136/bmjebm-2022-111952
- Greenwood, Margo, and Noni MacDonald. 2021. "Vaccine Mistrust: A Legacy of Colonialism." *The Globe & Mail* 31 March. https://www.theglobeandmail.com/canada/article-vaccine-mistrust-a-legacy-of-colonialism/
- Haddon, Catherine, Joe Devanny, Charles Forsdick, and Andrew Thompson. 2015. "What Is the Value of History in Policymaking?," January 23. https://www.instituteforgovernment.org.uk/publications/what-value-history-policymaking.
- Hassan, Narin, and Jessica Howell. 2022. "Global Health Humanities in Transition." *Medical Humanities*, vol. 48, pp. 133-37. http://dx.doi.org/10.1136/medhum-2022-012448
- Hinchliffe, Stephen, Mark A. Jackson, Katrina Wyatt, Anne E. Barlow, Manuela Barreto, Linda Clare, Michael H. Depledge, et al. 2018. "Healthy Publics: Enabling Cultures and Environments for Health." Palgrave Communications 4, no. 1 (May 15): 1–10. https://doi.org/10.1057/s41599-018-0113-9.
- Holbrook, Carolyn, and David Lowe. 2021. "Can Historians Influence Public Policy? Challenges and Possibilities." *History Australia* 18, no. 1 (January 2): 3–22. https://doi.org/10.1080/14490854.2021.1878464.
- Jones, Esyllt, Shelley Sweeney, Ian Milligan, Greg Bak, and Jo-Anne McCutcheon. 2021. Remembering is a Form of Honouring: Preserving the COVID-19 Archival Record. Ottawa: Royal Society of Canada.
- Langlois, Sylvia, and Allan Peterkin. 2019. "Promoting Collaborative Competencies through the Arts and Humanities: Lessons Learned from an Innovative IPE Certificate Program." *Journal of Interprofessional Education and Practice* vol. 16, https://doi.org/10.1016/j.xjep.2019.100267.
- Lingard, Lorelei. 2007. "The rhetorical 'turn' in medical education: What have we learned and where are we going?" Advances in Health Sciences Education, vol. 12, no. 2, pp. 121-33.
- Mackay, Charles. 1841. Extraordinary Popular Delusions and the Madness of Crowds. Foreword Andrew Tobias. Toronto: Random House, 1980.
- Miller, Adam. 2020. "The Key Lesson from SARS that Canada Failed to Heed when COVID-19 Hit." CBC. 17 October. https://www.cbc.ca/news/health/coronavirus-canada-sars-1.5766021
- Moore, Patrick. 1992. "When Politeness is Fatal: Technical Communication and the Challenger Accident." *Journal of Business and Technical Communication*, vol. 6, no. 3. https://journals.sagepub.com/doi/10.1177/1050651992006003001
- Morley, Ian. 2007. "City Chaos, Contagion, Chadwick, and Social Justice." *Yale Journal of Biology and Medicine*, vol. 80, pp 61-72.
- Mubareka, Samira, et al. 2022. Strengthening a One Health Approach to Emerging Zoonoses. Ottawa: Royal Society of Canada.
- Muhajarine, Nazeem, James Dixon, Erika Dyck, Jim Clifford, Patrick Chassé, Suvadra Datta Gupta, Colleen Christopherson-Cote, and Remember Rebuild Saskatchewan Team. "Capturing and Documenting the Wider Health Impacts of the COVID-19 Pandemic Through the Remember Rebuild Saskatchewan Initiative: Protocol for a Mixed Methods Interdisciplinary Project." JMIR Research Protocols 12, no. 1 (2023): e46643.
- Naylor, David, et al. 2017. Fundamental Science Review. Ottawa: Government of Canada. https://ised-isde.canada.ca/site/canada-fundamental-science-review/sites/default/files/attachments/2022/ScienceReview_April2017-rv.pdf
- Ng, Eve. 2020. "Unmasking Masculinity: Considering Gender, Science, and Nation in Responses to COVID-19." Feminist Studies vol. 46, no. 3, pp. 694-703. DOI: https://doi.org/10.1353/fem.2020.0025

- Ontario Society of Professional Engineers. 2021. "Engineers call on government to address the airborne transmission of COVID-19 ahead of September 2021 return to the classroom." https://ospe.on.ca/advocacy/engineers-call-on-government-to-address-the-airborne-transmission-of-covid-19-ahead-of-september-2021-return-to-the-classroom/
- Parmanand, Sharmila. 2022. "Macho Populists Versus COVID: Comparing Political Masculinities." European Journal of Women's Studies vol. 29, no. 15, pp. 43S-59S, https://doi.org/10.1177/13505068221092871.
- Peters, Megan. 2021. "Taiwan Creates CDC Anime to Raise Awareness of COVID." *Comicbook*. https://comicbook.com/anime/news/taiwan-cdc-anime-manga/
- Porter, Roy. 1986. "History Says No to the Policeman's Response to AIDS." Br Med J (Clin Res Ed) 293, no. 6562 (December 20): 1589–90. https://doi.org/10.1136/bmj.293.6562.1589.
- Porter, Roy. 1992. The Doctor of Society: Thomas Beddoes and the Sick Trade in Late-Enlightenment England. New York: Routledge.
- Porter, Roy, and Dorothy Porter. 1989. Patient's Progress: Doctors and Doctoring in Eighteenth-Century England. Stanford: Stanford University Press.
- Porter, Roy, and Lindsay Granshaw, eds. 1989. The Hospital in History. New York: Routledge.
- Preston, William. 1803. "An Essay On Credulity." Transactions of the Royal Irish Academy vol. 9, pp 47-81.
- Rabeneck, L. et al. 2023. Strengthening Health Care in Canada Post COVID-19 Pandemic. Ottawa: Royal Society of Canada. https://rsc-src.ca/sites/default/files/PCH%20PB_EN.pdf.
- "Remember, Rebuild Saskatchewan." https://rememberrebuild.ca/
- Roland, Charles G. 1998. "Sir William Osler." *Dictionary of Canadian Biography* http://www.biographi.ca/en/bio/osler_william_14E.html
- Saskatoon Public Library. "Local History COVID-19 Archive Project." https://saskatoonlibrary.ca/collections/local-history/local-history-covid-19-archive-project/
- Singh, Satendra, and Amir Maroof Khan, Upreet Dhaliwal, and Navjeevan Singh. 2022. "Using the Health Humanities to Impart Disability Competencies to Undergraduate Medical Students." *Disability and Health Journal*, vol. 15, no. 1. https://doi.org/10.1016/j.dhjo.2021.101218
- Social Sciences and Humanities Research Council of Canada (SSHRC). 2023. "Update: Canada's three research funding agencies extend pilot committee in support of interdisciplinary research for a third year." https://www.sshrc-crsh.gc.ca/news_room-salle_de_presse/latest_news-nouvelles_recentes/2023/taipr-iep-eng.aspx
- Sontag, Susan. AIDS and Its Metaphors. 1989. New York: Farrar, Straus, and Giroux.
- Stone, Marjorie. 2005. "The Humanities." *The Social Sciences and Humanities in Health Research* (Ottawa: CIHR), pp. 8-10. https://publications.gc.ca/collections/collection_2007/cihr-irsc/MR21-58-2005E.pdf
- Sullivan, Patrick, Victor Starr, Ethel Dubois, Alyssa Starr, John Bosco Acharibasam, and Cari McIlduff. 2023. "Where Past Meets Present: Indigenous Vaccine Hesitancy in Saskatchewan." *Medical Humanities* doi: 10.1136/medhum-2022-012501.
- Tomblin Murphy, Gail, Tara Sampalli, et al. 2022. *Investing in Canada's Nursing Workforce Post-Pandemic: A Call to Action.*Ottawa: Royal Society of Canada. https://rsc-src.ca/sites/default/files/Nursing%20PB_EN.pdf
- Wasson, Sara. 2010. Urban Gothic of the Second World War: Dark London. Macmillan Palgrave.
- White, Hayden. 1984. "The Question of Narrative in Contemporary Historical Theory." *History and Theory* vol. 23, no. 1, pp. 1-33.
- Wlodarczyk, Justyna. 2013. Cross-Cultural Delivery: The American Influence on Representations of Birth in Polish Popular Culture. *Genders*, no. 58, https://www.colorado.edu/gendersarchive1998-2013/2013/09/01/cross-cultural-delivery-american-influence-representations-birth-polish-popular-culture
- World Health Organization. History. https://www.who.int/about/history
- Wright, Julia M., Wendy Chun, Amanda Clarke, Matthew Herder, and Howard Ramos. 2022. *Protecting Expert Advice for the Public: Promoting Safety and Improved Communications*. Ottawa: Royal Society of Canada. https://rsc-src.ca/sites/default/files/pdf/PPA%20PB_EN.pdf
- Zadrozny, Sara. 2019. "Women's Ageing as Disease." Humanities vol 8, no. 2, https://doi.org/10.3390/h8020075.



The Royal Society of Canada

282 Somerset Street West Ottawa, Ontario K2P 0J6 www.rsc-src.ca 613-991-6990

La Société royale du Canada

282, rue Somerset ouest Ottawa (Ontario) K2P 0J6 www.rsc-src.ca 613-991-6990