

Foreword

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This book represents the culmination of a unique scholarly initiative located at the dynamic intersection of medical history and the digital humanities. It also represents an important outcome of the longstanding partnership between the National Endowment for the Humanities (NEH) and the National Library of Medicine (NLM) with Virginia Tech (VT) as a key collaborator.

The specific initiative which led to this book—*Viral Networks: An Advanced Workshop in Digital Humanities and Medical History*—was a landmark moment in the NEH/NLM partnership dating from 2012 when these agencies signed an agreement to “bring together scholars, scientists, librarians, archivists, curators, technical information specialists, healthcare professionals, cultural heritage professionals, and others in the humanities and biomedical communities in order to share expertise and develop new research agendas representing the commitment of the NLM to supporting scholarship in medical history and digital humanities.”¹

Since that initial agreement, the NEH/NLM partnership has achieved its goals—if not exceeded them every step of the way—thanks to unwavering mutual support and commitment to advance scholarship in medical history and digital humanities. Such commitment was evident at the public program associated with *Viral Networks*. Taking place on the centenary of the 1918 influenza pandemic, it featured Theresa MacPhail, PhD, Assistant Professor, Science and Technology Studies, Stevens Institute of Technology, speaking about her authorship of *The Viral Network: a Pathography of the H1N1 Pandemic* (Cornell University Press, 2014). The *NIH Record*—one of the agency’s leading publications—covered her lecture as a feature story, and the global livestream of the occasion remains available for all to appreciate, archived permanently by NIH Videocasting.²

“Our responses to outbreaks are conditioned by what we know about past outbreaks,” MacPhail observed, as quoted in the *NIH Record*. “They rely upon institutions and structures put in place as a result of prior outbreaks and are often as much about politics and economic constraints as they are about science.” She continued:

We have to think about outbreaks, epidemics and pandemics holistically. We have to look at everything—history, politics, economics, biology, culture—all at once in order to understand not only what happened, but also what is happening and what is likely to happen in the future.

Preceding the workshop, the leaders of NEH and NLM signed a memorandum of understanding reaffirming their inter-agency partnership, paving the way to additional collaboration on research, education, and career initiatives, and no less to help ensure that the trajectory of inquiry suggested by MacPhail continues. To these ends, during the introduction of MacPhail’s presentation, NLM Director Patricia Flatley Brennan stated that partnerships like the one between the NLM and the NEH “are quite important to the NLM because they help to create and sustain an interdisciplinary and collaborative platform for discovery at the Library” and across the National Institutes of Health campus:

Creating such a platform is a key goal of our new strategic plan and commitment to growing infrastructure and supporting data-driven scholarship and inquiry for the benefit of medical research as well as the disciplines that intersect with medical research, like the humanities and medical humanities.³

NEH Senior Deputy Chairman Jon Parrish Peede expressed a similar objective in his own welcoming remarks to the workshop participants:

NEH is pleased to team up with the NLM to help support conferences and workshops aimed at training historians of

medicine on the latest research techniques and to bring together biomedical scientists and humanists to explore possibilities of a collaborative nature. We look forward to many more fruitful ventures between our two organizations as we push both the boundaries of the humanities and the biosciences together.⁴

And pushing these boundaries was the very hallmark of the NEH/NLM partnership leading up to *Viral Networks*, with a series of projects bringing the agencies together with key collaborators to engage an increasing number of scholars from across the disciplines in the process of defining and advancing common ground in twenty-first century research methods. In April 2016, the NLM hosted the workshop *Images and Texts in Medical History: An Introduction to Methods, Tools, and Data from the Digital Humanities*, bringing scholars together to explore emerging approaches to the analysis of texts and images in the field of medical history. The workshop was funded by the NEH through a grant to Virginia Tech and held in cooperation with Virginia Tech, The Wellcome Library and The Wellcome Trust.⁵ In October 2013, Virginia Tech hosted at its Research Center in Arlington, VA, *An Epidemiology of Information: New Methods for Interpreting Disease and Data* to explore new methods for large-scale data analysis of epidemic disease.⁶ In April 2013, through its own grant from the NEH, and with generous support from Research Councils UK, the Maryland Institute for Technology in the Humanities at the University of Maryland organized and hosted *Shared Horizons: Data, Biomedicine, and the Digital Humanities* to explore the intersection of digital humanities and biomedicine.⁷ Coinciding with *Shared Horizons*—indeed in the spirit and practice of the collaboration and openness in research it represented—the NLM released the Extensible Markup Language (XML) for its IndexCat™ database, including more than 3.7 million bibliographic items spanning five centuries.⁸ Such commitment to opening and sharing data of all kinds—and no less representing all formats of knowledge—remains a hallmark at NLM. The collaboration with the NEH and many more like-

minded partners inspires all of us to advance the open-research enterprise in new and exciting ways through tools of the digital humanities and knowledge of medical history.

About *Shared Horizons* itself, Erez Aiden and Jean-Baptiste Michel observed in their 2013 book, *Uncharted: Big Data as a Lens on Human Culture*, that the name of the conference was “dead on,” and that the collaboration behind it pointed to “the most exciting terrain in our intellectual future” being at “the interface of all our work”:

No one knows quite what to call it. And no one knows quite where it's going. But one thing is certain: Science and the humanities are becoming, once again, kindred spirits. And just as Galileo transformed our understanding of the world in the seventeenth century, these two lenses, back to back, will do the same in the twenty first....⁹

This book—*Viral Networks*—fits in the dynamic trajectory described by Aiden and Michel, as it represents true collaboration and commitment among a group of dedicated scholars, two federal agencies and their strategic partners, and one of America's most important public, land-grant, research universities. And this book represents such collaboration and commitment even more because it is available from *VT Publishing* in an open-access format, for all to appreciate as the studies therein engage undiscovered or underappreciated primary sources, push methodological boundaries to define and articulate new arguments, and chart new research trajectories. Indeed, this book defines the scholarly times in which its organizers conceived and published it as much as these times define the book itself.

With its editors and contributors, I am thrilled to see this book appear, go viral—fulfilling the very promise of its name and its open-access format—and inspire further collaborative research and new platforms for discovery of the human condition located at the intersection of medical history and the digital humanities.

Endnotes

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5. National Library of Medicine. "NLM to Host *Images and Texts in Medical History: An Introduction to Methods, Tools, and Data from the Digital Humanities*." [nlm.nih.gov](https://www.nlm.nih.gov/news/nlm_host_images_texts_med.html). https://www.nlm.nih.gov/news/nlm_host_images_texts_med.html (accessed May 2018).
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8. National Library of Medicine. "NLM Releases Extensible Markup Language (XML) for IndexCat™ Data. Data Includes More than 3.7 Million Bibliographic Items Spanning Five Centuries." [nlm.nih.gov](https://www.nlm.nih.gov/news/indexcat_data_xml.html). https://www.nlm.nih.gov/news/indexcat_data_xml.html (accessed May 30, 2018).
9. Erez Aiden and Jean-Baptiste Michel, *Uncharted: Big Data as a Lens on Human Culture* (New York: Penguin, 2013): 207-208.