

GALE DH FELLOWSHIP AT UNIVERSITY OF OXFORD SUPPORTS NEW RESEARCH A CASE STUDY

A Gale-funded fellowship at the University of Oxford supports a project that uses geographic information system (GIS) technology to map the spread of infectious diseases in Victorian England. Its creator believes it could transform how scholars study other diseases in the future.

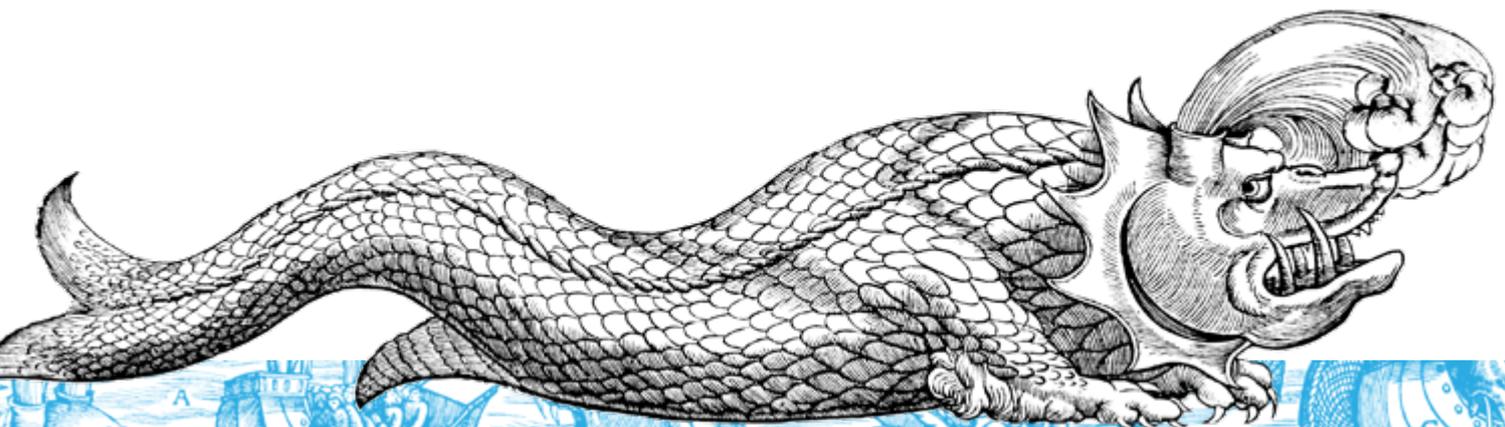
Digital humanities (DH), which involves the use of text and data mining technology to study such humanities disciplines as history and literature, is a rapidly growing field with important implications for how we understand the world and our role within it.



With the help of the Gale-Oxford DH Fellowship program, Chinese scholar Dr. Xiurong Zhao is adding to this field with an innovative project that could change how scientists and researchers study the spread of infectious diseases in the future.

Dr. Zhao, a professor at Renmin University of China, was awarded a Gale-Oxford DH Fellowship for the 2022–23 academic year. Funded by Gale, the program supports scholars for a three month period of research into a DH-related topic at the University of Oxford. The goal of the fellowship program is to encourage emerging DH scholarship in the Asia-Pacific region.

Dr. Zhao's project, "*The Use of GIS to Map Infectious Diseases in Victorian England*," seeks to find new answers about the causes of infectious diseases and their spread, as well as the social impact of these diseases. With the support of content from *Gale Primary Sources* and data analysis tools from *Gale Digital Scholar Lab*, Dr. Zhao is employing new research methods to analyze epidemiological data and produce GIS-based disease maps that are both comprehensive and accessible.



USING INNOVATIVE TOOLS TO SUPPORT DIGITAL HUMANITIES RESEARCH

Traditionally, historians, epidemiologists and other scholars who study the effects of infectious diseases have used text-based sources to trace the spread of these maladies. Dr. Zhao is using GIS software to create dynamic maps showing the spread of cholera across England in the 19th century, and her work could make it easier for scholars and others to trace the effects of the disease using powerful yet simple-to-use visual tools.

“I am very impressed with *Gale Primary Sources*. I use it a lot, and I encourage my students to use it a lot as well,” Dr. Zhao says. “I have found the search tools and filters to be well designed. It’s a very rich source of information.”

Thanks to the Gale-Oxford DH Fellowships program, Dr. Zhao has been able to continue her research at the University of Oxford’s Bodleian Libraries, where she has discovered additional sources for her project—including an official record of cholera cases in the Oxford area from the 1850s. She has also learned how to use *Gale Digital Scholar Lab*, a platform that empowers digital humanities scholars with new ways of analyzing content and visually sharing their discoveries.

Gale Digital Scholar Lab gives users the ability to create custom content sets containing as many as 10,000 documents. Users can search across their library’s *Gale Primary Sources* holdings and seamlessly select documents to be added to their custom content set. They can analyze the data with built-in text analysis and visualization tools and publish their outputs.

THE REAL-WORLD IMPACT OF DIGITAL HUMANITIES RESEARCH

With the help of these tools, Dr. Zhao is creating GIS-based maps that show the spread of cholera in 1850s Victorian England and are easy to understand for scholars and laypeople alike.

“GIS permits a dynamic link between historical databases and maps, so that data is quickly reflected on these maps,” Dr. Zhao says. “It provides a new means of visualizing and analyzing epidemiological data, revealing key trends and interrelationships that would be difficult to discover in the data tables alone.”

Her work in depicting this information visually over time could lead to new insights in understanding how the disease spread and what impact it had on 19th-century English society. It also has far-reaching implications for how scientists and scholars study other infectious diseases throughout history, from the bubonic plague that killed millions of people in the 1300s to COVID-19 and future pandemics.

“Maps developed using GIS are easy to understand, even to those who are not familiar with the technology. They are also easily understood by the public,” Dr. Zhao says. “With this project, I am trying to introduce a new methodology—and if I am successful, I believe this methodology could be used in other countries to study other diseases.”

SUPPORTING AND ENHANCING DIGITAL HUMANITIES WITH GALE

This is an exciting time for DH research, as new advancements in technology are transforming how scholars can interrogate historical information and take their research to new levels.

Gale is supporting these efforts with programs like the Gale-Oxford DH Fellowship and tools such as *Gale Digital Scholar Lab* and digitized archives in *Gale Primary Sources*. Academic leaders can encourage innovation and boost interest in the DH by equipping students and researchers with these resources, which unlock significant new insights and remove barriers to digital scholarship.

“Digital humanities is giving us new perspectives and understandings of society and cultures from the past,” Dr. Zhao concludes. “Digital humanities is not only opening exciting new opportunities for academic research but is also capable of engaging the public in new ways.”

[View a video](#) of Zhao discussing her experience of the fellowship at Oxford.

LEARN MORE ABOUT THE PROGRAM HERE:

Gale-Oxford Digital Humanities Fellowships

