

Health Narratives: A Multidisciplinary Approach to Understanding Health-Related Information and Dissemination in Social Media

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With major health organizations embracing social media (SM) as a new avenue to communicate and harvest health-related information to/from the general public, advancing our understanding of the patterns of health narrative in SM is a novel multidisciplinary scientific challenge with substantial potential impact. This is the topic that we are addressing in this project.

We request funds to support the establishment of a cross-disciplinary team of experts to advance science on understanding the mechanisms through which health information is disseminated through SM, and how such mechanisms can be leveraged to improve health communication. We do so by bringing together existing areas of excellence at Mason: geosocial media analysis, epidemiology, and communication, all of which are part of Mason's intellectual signature. Through this award we will coalesce and elevate these existing capabilities to establish a top-notch multidisciplinary research team that will pursue competitive external funding in this emerging research direction.

The challenges that we will address focus on understanding how health-related information is disseminated through SM, and how opinions are formed and debated therein. Information dissemination in SM follows complex patterns, whereby the narrative is generated, shaped, and propagated across geographical spaces and societal structures, either intensifying to reach a broader audience or simply fading away. This process can be *top-down*, initiated by authoritative sources, or *bottom-up*, whereby the general public is exchanging information or misinformation to generate a narrative that may align with, or diverge from, the official message. Such information directly affects individuals and communities: misinformation may inhibit appropriate responses or lead to overreactions that burden the health system. In that sense, the impact of a disease epidemic is no longer limited to people who are *infected* but also includes *affected* communities.

We will proceed by analyzing a small set of representative sample health narratives related to communicable and *non-communicable* diseases, to set the foundation for a research portfolio that will help us pursue future competitive funding. Direct outcomes aim to elevate our group to national eminence, and include publications, a proposal, hosting two networking workshops, and establishing a small-scale prototype of a Disease Narrative Atlas website to support dissemination of our findings inside and outside of Mason.