The interdisciplinary field of global health has grown exponentially in recent years (Sparke, 2009). Prior to the 1990s, the term *global health* was mentioned in the titles of only a small handful of research papers. At that moment in time, though global health research was certainly being conducted, it was not being done in the name of a specific field of inquiry. To an extent, this picture has changed. In recent times, a field has cohered around the idea of global health, and it is one that is increasingly ubiquitous in the degree programs of universities around the globe (Neely and Nading, 2017). Moreover, a diverse range of disciplines, including geography, are now much more inclined to contribute research and scholarship labeled as *global health* (Brown and Moon, 2012; Herrick and Reubi, 2017).

With this in mind, we aim in this chapter to interrogate the scope of this geographical work by focusing on three broad thematic areas: global health, inequality and justice; global health governance; and more-than-human global health. In so doing, we identify key areas where a distinctly geographical perspective has contributed to and, we argue, broadened interdisciplinary scholarship.

### Health, inequality and justice

The specific question of health inequality arguably should be at the core of geographical research into global health; especially if we consider that “global health,” at least with regard to one of its more prominent definitions, is described as a concern to achieve “[h]ealth equity among nations and for all people” (Koplan et al., 2009, p. 1994). This was certainly a starting point for a recent review of geography’s engagement with global health, which highlighted the significance of the World Health Organization’s Commission on the Social Determinants of Health (Brown and Moon, 2012).

The question of global health justice remains a pertinent one. As Simon Reid-Henry (2016) suggests, while significant resources have been ploughed into global health initiatives in recent years and have gone some way to achieving health-oriented Millennium Development Goals — citing as examples a reduction in the number of women dying in childbirth and an increase in people living with AIDS receiving antiretroviral treatment— little has been achieved with regard to an oft-stated desire to reduce global health inequalities. As a starting point for responding to the latter, Reid-Henry posits that what is needed is not more research into why health inequalities are so persistent, but a different focus entirely. As he argues, “[w]hen it comes to the question of global health *inequality* in particular, the particular model of justice that is in play matters greatly” (2016, p. 721). Further, Reid-Henry encourages researchers to consider more
carefully how competing models of justice – he identifies market justice and social justice as the dominant competing models at play in global health discourse – frame and ultimately shape global health policy. The significance of this attention to justice and its shaping of policy lies in the argument that market-justice models, which Reid-Henry identifies as the dominant model at play in mainstream global health policy today (cf. Sparke, 2009), have led to targeted, vertical interventions that cure rather than prevent a fairly narrow range of global health problems.

Where Reid-Henry calls for refocusing on the models of justice at play in global health policy, other geographers have begun to argue for a response that builds upon the contextual or place-oriented approaches that have dominated research on health inequalities. To an extent, such a call mirrors the critique of health-inequalities research offered by Susan Smith and Donna Easterlow (2005) in their account of the “strange geographies of health inequalities,” which for them meant an overemphasis on commonsense understandings of the influence of place or context on health. Though responding to the conceptualization of health inequality as it stood at the time – that is, as a reflection of either individual (compositional) or area (contextual) factors, but rarely both – their paper is especially helpful because it acted to remind health geographers that health inequalities are intimately connected to social and spatial processes, such as discrimination and social inequality in all their varied forms. Moreover, it argued for a much more embodied and people-oriented approach to our understanding of how different health experiences shape a person’s position in society and space. At issue here is a questioning not so much of health geographers’ commitment to equity and justice as of how they ought to go about doing global health inequalities research.

One way of bridging this gap between observed health inequalities and an understanding of the social, cultural and political processes shaping global health has been the adoption of a political ecology of health perspective. Such an approach is certainly not new to health geographers (or, perhaps more appropriately, medical geographers; see Mayer, 1996). While some of the more recent work in this tradition has sought to outline what a political ecology of health perspective brings to understanding the uneven geographies of health – that they are “problems, which are relationally intertwined, produced over time, inherently political, and always simultaneously material and symbolic” (Jackson and Neely, 2015, p. 48) – other studies have more explicitly engaged with global health research agendas. Abigail Neely and Alex Nading (2017), for example, argue that a focus on embodiment and place is crucial to critiques of global health. Drawing on their study of a local nutrition intervention in Nicaragua and another study into the experiences of tuberculosis treatment in South Africa, they seek to understand how global health priorities and protocols are enacted locally and to explore how power relations that operate at multiple scales shape people’s everyday experiences of global health in place. As they argue, a political-ecology perspective enables analyses that focus on the effects of global health interventions on people, places and diseases, as well as on the ways in which place produces and is produced by sickness and health.

Improving the health of others

As a multibillion-dollar enterprise with significant social, political, and economic benefits, the task of improving global health weaves together ministries of health, physicians, patients and super-rich donors in a complex web of multinational institutions, bilateral partnerships, and advocacy networks. A growing number of geographers have begun to interrogate the governance of interventions in the lives and health of others in order to better understand the motivations of those involved and how they, in turn, shape global health approaches and agendas (Laurie, 2015).

It is perhaps unsurprising that individual states and multinational institutions play a key role in global health decision-making. In the 19th and early 20th centuries, the growing circulation of people and things – made possible by developments in trade and transport – led to some of the first international agreements
between states, meant to secure borders against the spread of infectious diseases (Ingram, 2009). As interconnectedness increased after the Second World War, global health was further entrenched as a geopolitical concern; it is no surprise, for instance, that one of the first specialized agencies of the United Nations (UN) was the World Health Organization (WHO). Under the WHO umbrella, Geneva-based global health institutions pioneered expert-led, disease-specific (vertical) interventions that succeeded, among other things, in eradicating smallpox and improving the lives of millions living with HIV/AIDS. Such governance approaches have, however, been criticized for their perceived entrainment within geopolitical agendas – particularly the prescriptions of the cozy Washington consensus on international development existing between the International Monetary Fund, the World Bank, and the US Treasury Department – and for their focus on anachronic and highly technical forms of intervention that have been frequently insensitive to local priorities and concerns (Taylor, 2017).

Alongside – and frequently in competition with – this network of state-focused initiatives are a series of increasingly influential non-state global health actors. Loose alliances of non-governmental organizations and grassroots initiatives have come to play a prominent role in global health governance. Clare Herrick (2014), for instance, notes the increasing prominence of the NCD Alliance, a lobbying group of 2,000 civil-society organizations, in advocating patient-centered approaches to non-communicable disease. Private interests have also become key players in the field of global health, and the logics of the market have frequently been lifted into efforts to improve human health and well-being. These approaches have prioritized return-on-investment and have deployed metric-based forms of evaluation, often borrowed from the financial sector. Others have raised concerns about conflicts of interest that emerge when corporations – some of which market products that negatively impact health – are involved in health research and interventions. David Reubi (2013), for instance, traces the influence that tobacco companies and their proxies have had on distorting public-health messaging in the Global South. Likewise, Herrick (2016) examines corporate behavior within the alcohol industry and the efforts of the industry to sway public opinion and shape global policy agendas through extensive lobbying.

Market habits and behaviors are inculcated through global health interventions in other ways too. In their work on the influence of philanthropic donors in global health, Katharyne Mitchell and Matthew Sparke (2016) trace the contours of a new Washington consensus, an approach to global governance driven not by the macroeconomic development policies of Washington, DC, institutions but rather by the cluster of philanthropic actors based in Washington State. Spearheaded by the Seattle-based Bill & Melinda Gates Foundation – the world’s wealthiest private foundation – this cluster of organizations (including the health innovation company PATH) promotes market-mediated innovations in global health. Big global problems, the Gateses propose, are best fixed not by dependency-inducing charity but by targeted micro-financial investments that catalyze innovation and change. This approach is typified by the Gates-backed initiative to finance immunizations for children through the issuing of vaccine bonds into the capital market, which release vaccine funding while promising investors a fixed return. The growth of this so-called philanthrocapitalism has not been without controversy, and a chorus of critical voices have interrogated the motives of the super-rich intervening in the lives of (distant) others (Nally and Taylor, 2015). Can creative forms of capitalism, for instance, solve health problems that many consider to be the products of market injustices in the first place? Or is this philanthropy, as the son of one major donor suggests, merely “conscience laundering” through which the wealthy assuage their guilt for past corporate practices through high-profile investments (Buffett, 2013, p.A19)?

From state interventions at the border to the geopolitics and geo-economics of global health, all attempts at improving the lives of others are political in the strongest sense. What is prioritized for intervention, as well as how such efforts are designed and deployed, are vital questions of governance to which geographers of global health must remain attentive.
More-than-human global health

A growing body of geographical research has sought to decenter established accounts of global health interventions that prioritize concerns of the human. Inspired by a more-than-human turn within geography more broadly (Whatmore, 2002), this research approaches global health concerns from an alternative vantage point: that of the much-maligned bugs, viruses, bacteria and parasites that live within and beyond the human body. What, we might ask, do efforts to appraise and improve global health look like if we position a mosquito, or even the microscopic malaria parasite, as the object of our attention, rather than the infected child or the weakened health system in which they struggle to get care?

Where the non-human world has been considered in past global health interventions, it has often been positioned as an unruly and adversarial space to be controlled, conquered and even destroyed through the application of human effort and technology. The Rockefeller Foundation, a leading philanthropic funder of international health efforts in the 20th century, financed ambitious campaigns to eradicate non-human vectors of infectious diseases, such as hookworm, malaria and yellow fever. In his work on the attempted eradication of malarial mosquitoes in 1940s Argentina through widespread spraying of the insecticide DDT, Eric Carter (2009) documents the huge financial, civilian and military mobilizations necessary to launch an ultimately futile war against legions of tiny insects. We can see present-day parallels of this approach in the work of the Bill & Melinda Gates Foundation, which has prioritized the eradication of polio and – once again – malaria (Taylor, 2016). Learning lessons from the spraying of toxic DDT, the Gateses’ approach to malaria eradication has harnessed the power of modern genetic technology to edit the genome of malarial *Anopheles* mosquitoes to eventually make them sterile and unable to reproduce; the deployment of what we might term extinction technology raises real concerns about how much control one wealthy couple has over the fate of an entire species.

And yet despite these efforts at eradication, Ian Shaw and colleagues (2013, p. 266) remind us that “the mosquito, it seems, always persists; its monstrous reputation is at least in part due to its ability to escape strategies and tactics of control.” While we may vilify the pesky mosquitoes – and viruses and bacteria for that matter – as mindless spreaders of infectious disease, these non-human species have a liveliness of their own that is difficult to contain. The *Anopheles* mosquitoes spreading Zika virus across South America in 2016 survived and reproduced in stagnant water collected in the detritus – empty barrels, upturned bottle caps and dog bowls – of everyday human existence (Carter, 2016). Likewise, the non-human world also has little respect for increasingly sophisticated health surveillance, control and containment policies being rolled out by state actors. As Vincent Del Casino and colleagues (2014, p. 546) point out, “polioviruses maintain themselves by seeping through the boundaries – real or imagined – we use to contain them.” A more-than-human global health, then, must be attentive to the ways in which the fate of humans and non-humans is increasingly entangled, as research on the vital importance of the trillions of bacteria in the human microbiome attests (Lorimer, 2017). Rather than develop interventions that cast humans and non-humans as mortal enemies, we might reconsider how important these companion species are to our health. “What if managing mosquitoes is not about how best to eliminate them,” Uli Beisel (2015, p. 153) asks in her research on malaria in Ghana, “but about asking how we might find ways to tolerate coexisting with each other?”

The question of coexistence has gained international traction through the popularity of the One World, One Health initiative. This approach to human and animal health has attempted to better integrate the traditionally distinct domains of veterinary, human, and environmental health in order to tackle the health impacts of pathogens – such as avian and swine influenzas – capable of moving between species. Now integrated into the work of the UN, WHO and Food and Agriculture Organization (FAO), this approach has led to the establishment of standardized barrier techniques and biosecurity practices in agriculture designed to halt transmission of microbes between humans and non-humans. And yet for the shared geographical
imagination that the One World model of coexistence promotes, Steve Hinchliffe (2015) argues that this approach to zoonotic disease tends to reassert the primacy of human control over the non-human world. Coexistence, in this approach, is a highly managed process with internationally accepted and applied norms around the production, surveillance and regulation of non-human lives. A more-than-human critique of such an initiative would emphasize that control of the non-human world is never straightforward; coexistence is, in other words, messy and contingent. Global health approaches that champion human mastery over the non-human world – from DDT to One World, One Health – ignore the lively adaptability and slipperiness of bugs, viruses, and bacteria at their peril.

**Thinking geographically about global health**

Global health is not short of inspirational leaders and voices, but few articulate the centrality of geographical concerns as astutely as Paul Farmer, a Harvard-trained physician and founder of the international health charity Partners in Health. In his powerful reflections over the course of several decades of professional medical practice and HIV advocacy in rural Haiti, Farmer (1992; 2003) documents a growing conviction of the need to acknowledge and remedy the social, political and cultural determinants of ill health that are so impactful yet poorly understood in many parts of the world. “Our analysis [of global health problems] must be geographically broad,” argues Farmer (2003, p. 159), because “the world that is satisfying to us is the same world that is utterly devastating to them.” It is encouraging to hear an attentiveness to geographical concerns given such prominence in a call for reimagining extant approaches to global health. We can but hope that further opportunities will come into being for geographers to collaborate meaningfully with medical researchers to improve the health and well-being of individuals and communities across our increasingly interconnected world and, in so doing, respond to the many pressing challenges facing global health – whether the unevenly felt impact of global climate change (Curtis and Oven, 2012), the emergent crisis of antimicrobial resistance (WHO, 2015) or the pressing issue of toxic air affecting many of the world’s major cities (WHO, 2016).

**References**


Global health geographies


