## **Profile**

## Rebecca Katz: leading light in global health security

It may seem strange that the Global Health Security 2019 conference, in Sydney, NSW, Australia, on June 18–20, is the first of its kind, but as Rebecca Katz, Director of the Center for Global Health Science and Security at Georgetown University, Washington, DC, USA, explains: "The global health security field is actually relatively young, and while a lot of work has been going on in many parts of the world over the past decade or so, the Sydney meeting will be a unique opportunity to bring the key players together to help shape future priorities."

The Center for Global Health Science and Security mainly directs research and in-country advisory work on WHO's International Health Regulations (IHR) and provides expert consultancy in biosecurity. "We are now able to gather meaningful data to inform our policy work", she says. "Finance is a key metric as governments and donors need to know how much money is needed to create effective and sustainable health security; how much a disease surveillance system or laboratory costs to run, for example. Essentially we are a policy shop, and while we travel frequently for country visits, it is usually to scope health security projects and establish relationships with partners. The majority of our work comes from the analysis we do back at Georgetown", she explains.

Public health was an established milieu for Katz's family; her parents worked during the HIV epidemic of the 1980s. With aspirations to be a health economist, it was while doing voluntary work in maternal health in southern India, after her undergraduate degree in political science and economics from Swarthmore College, that her plans took an unexpected turn. Katz became ill and, on returning to the USA, discovered she had *Brucella melitensis*. Seriously debilitated, she chose to do a master's in public health at Yale University, partly to be closer to her doctors. "While studying infectious disease epidemiology, I read everything I could find about *Brucella*, which introduced me to the world of bioterrorism, as *Brucella* had been one of the first agents to be developed as a potential agent of biological warfare, when the US had an offensive biological weapons programme back in the 1950s", she says.

Princeton University offered Katz a place for PhD research in health and security, where, on Sept 10, 2001, she handed in a research report on the close relation between public health programmes and national security. "Everything changed the following day, with 9/11 and the subsequent US anthrax attacks", she recalls. "Suddenly there was a groundswell of interest in biosecurity, money started to flow into academic programmes, and great interest developed in my PhD work." Katz used a summer break from her PhD to do an internship at the Defense Intelligence Agency in Washington, DC, where she was given access to documentation on "yellow rain" (the disputed use of Soviet-backed toxin warfare in the late 1970s and early 1980s), which became the topic of her dissertation.

Her expertise in analysing combined knowledge of disease epidemiology and intelligence led to Katz being offered a role in the US Department of State, which she has held for the past 15 years, as a public health consultant supporting the US delegation to the Biological Weapons Convention. In 2006, George Washington University offered her a faculty position. "I became drawn into academia with the opportunities of teaching and research in the emerging specialty of global health security", she says. Katz moved her research team to Georgetown University 3 years ago, and will become a full professor there in July.

Katz disagrees with WHO's position to not declare the Ebola outbreak in DR Congo a public health emergency of international concern (PHEIC). She thinks their decisions have been based on "an inaccurate interpretation of the language of the IHR, which states that an outbreak can be called a PHEIC if it has the potential to cross international borders. Now that the disease has crossed borders, and given the complexity of this particular outbreak, I feel they should have made the declaration", she says. "SARS showed the world how quickly a disease outbreak could spread internationally, and why we need international treaties to respond to and prepare for public health emergencies, which is why implementation of WHO's IHR is so important", she says. Yet her work is not just focused on macro-projects operating globally; her team is focusing on engagement with municipal leaders around the world to enhance the response to local public health emergencies. "Local municipal leaders also need the tools to act appropriately in response to public health crises", she says. "If we look at the current measles outbreaks around the world, vaccination policy is often made at national or intermediate levels of governments, but it is local public health and political officials who have to manage and contain outbreaks in cities."

Adam Kamradt-Scott, Associate Professor in the University of Sydney's Department of Government and International Relations, is co-organiser of the Sydney conference with Katz, and comments: "Rebecca has consistently led the way in undertaking cutting-edge research to assist countries meet their obligations under the IHR. She has brought the same leadership and passion for her scholarly work to our eagerly anticipated meeting." Katz hopes the meeting "will help solidify a community of practice and work towards common understandings of objectives, challenges, and opportunities in global health security. The future research agenda is evolving, with strong work developing on overlaps with universal health coverage, gender, financing, One Health, and outbreak response in complex environments. Effective research and policy will require a multisectoral approach."

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