

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

## Closing the NIH Fogarty Center threatens US and global health

The budget set out by the Trump administration for the 2018 fiscal year proposes cutting about US\$6 billion from the National Institutes of Health (NIH). Specifically, this budget intends to eliminate the John E Fogarty International Center, which currently receives 0.2% of the NIH's 2017 budget of \$33.1 billion. Despite its modest size, the Fogarty Center has become a crucial contributor to health research worldwide over the past 50 years by funding the training of over 6000 scientists in developing countries, including many of the world's leading scientists in infectious disease research.

The advancement of scientific expertise in developing countries is essential to ensure sufficient local capacity to detect and rapidly respond to epidemics at their point of origin. This local expertise will allow outbreaks to be quickly contained and their effects minimised, thereby directly protecting the health and safety of people in the USA and worldwide.

The 2014 Ebola outbreak is a sobering reminder of the need to improve the capacity to detect, respond to, and prevent the spread of health threats in developing countries. Several clinicians and scientists involved in the local response to the Ebola outbreak in Africa were Fogarty Center trainees. The Fogarty Center is now leading an initiative to develop scientific expertise in Guinea, Liberia, and Sierra Leone to bolster the local response to the next outbreak of a fatal infectious disease.<sup>1,2</sup> The response to the Ebola outbreak was further to the key role served by the Fogarty Center in developing local expertise to effectively respond to the outbreaks of avian influenza and severe acute respiratory syndrome that began in China and subsequently spread to several countries, including the USA.

Research by Fogarty trainees has frequently benefited the USA. For

example, a clinical trial<sup>3</sup> done in South Africa by several Fogarty Center trainees and grantees on the management of HIV and tuberculosis co-infection is saving lives in many countries, including in the USA. The results of this trial contributed to the revision of the US Department of Health and Human Services<sup>4</sup> and WHO<sup>5</sup> guidelines on the treatment of patients co-infected with HIV and tuberculosis. Implementation of the treatment approach proposed by the trial is preventing many deaths across Africa, Asia, and the Americas.<sup>6</sup>

Infectious diseases have no nationality and respect no borders, even in countries that restrict immigration. Global health research involves and benefits all countries. As a major beneficiary of global health initiatives, the USA should therefore value and expand the work of the Fogarty Center. This centre is a major contributor to global health, both domestically and internationally, and to safeguarding the USA and the world against future epidemics.

All authors have been trainees at Fogarty International Center, recipients of grants from this centre, or both.

## \*Salim S Abdool Karim, Quarraisha Abdool Karim, Alash'le Abimiku, Linda-Gail Bekker, Elizabeth A Bukusi, Marie Marcelle H Deschamps, Miliard Derbew, Patricia J Garcia, Glenda Gray, Moses R Kamya, Soumya Swaminathan, Zunyou Wu salim.abdoolkarim@caprisa.org

Centre for the AIDS Programme of Research in South Africa (CAPRISA), Durban 4013, South Africa (SSAK, QAK); Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY, USA (SSAK, QAK); University of KwaZulu-Natal, Durban, South Africa (SSAK, QAK); Institute of Human Virology, Abuja, Nigeria (AA); Institute of Human Virology, University of Maryland School of Medicine, Baltimore, MD, USA (AA); Desmond Tutu HIV Centre, University of Cape Town, Cape Town, South Africa (L-GB); International AIDS Society, Geneva, Switzerland (L-GB); Center for Microbiology Research, Kenya Medical Research Institution, Nairobi, Kenya (EAB); Department of Global Health and Department of Obstetrics and Gynecology, University of Washington, Seattle, WA, USA (EAB); GHESKIO Centers, Port-au-Prince, Haiti (MMHD); Department of Surgery, Addis Ababa University, Addis Ababa, Ethiopia (MD): College of Surgeons of East Central and Southern Africa, Arusha, Tanzania (MD); Ministry of

Health, Lima, Peru (PJG); South African Medical Research Council, Cape Town, South Africa (GG); Perinatal HIV Research Unit, University of Witwatersrand, Johannesburg, South Africa (GG); Makerere University School of Medicine, Kampala, Uganda (MRK); Department of Health Research, Government of India, New Delhi, India (SS); Indian Council of Medical Research, New Delhi, India (SS); Chinese Centre for Disease Control and Prevention, Beijing, China (ZW); and Department of Epidemiology, University of California, Los Angeles, CA, USA (ZW)

- Zeitvogel K. Fogarty protects Americans by building pandemic response capacity in Ebolahit West Africa. *Global Health Matters* March/ April 2017; **16**: 1–3. https://www.fic.nih.gov/ News/GlobalHealthMatters/march-april-2017/ Pages/building-capacity-for-ebola-west-africa. aspx (accessed May 10, 2017).
- 2 Fogarty International Center. Fogarty provides support to Ebola-affected countries. November, 2016. https://www.fic.nih.gov/ News/GlobalHealthMatters/novemberdecember-2016/Pages/research-capacity-incountries-affected-by-ebola.aspx (accessed May 10, 2017).
- Abdool Karim SS, Naidoo K, Grobler A, et al. Timing of initiation of antiretroviral drugs during tuberculosis therapy. N Engl J Med 2010; 362: 697–706.
- 4 Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. July 14, 2016. http://www. aidsinfo.nih.gov/ContentFiles/ AdultandAdolescentGL.pdf (accessed May 3, 2017).
- 5 WHO. Rapid advice. Antiretroviral therapy for HIV infection in adults and adolescents. November, 2009. http://www.who.int/hiv/pub/ anv/rapid advice art.pdf (accessed July 6, 2017).
- 6 WHO. Global tuberculosis report. 2016. http:// www.who.int/tb/publications/global\_report/en/ (accessed July 6, 2017).

## Collaborating to achieve Global Vaccine Action Plan goals

In their Comment, Margaret Chan and colleagues<sup>1</sup> (Feb 25, p 777) highlight the progress being made to achieve the goals of the Global Vaccine Action Plan (GVAP)<sup>2</sup> and the results of the mid-term review of progress issued by WHO's Strategic Advisory Group of Experts (SAGE) on immunisation.<sup>3</sup> They also summarise the remaining challenges and call on all stakeholders to do more to achieve GVAP goals.

We believe the remaining challenges fall into six categories: inadequate support by donors and governments to strengthen ongoing immunisation services, insufficient

For more on the John E Fogarty International Center see https:// www.fic.nih.gov