

remains secret. Genentech's civil [complaint](#), which the company released in parallel with the federal indictment, makes the case that biosimilar producers have to develop their own "analytical methods, release tests, or quality specifications for a reference medicine", as well as developing validated "assays" and processes compliant with good manufacturing practice standards. That information, says the complaint, took "many years and hundreds of millions of dollars to develop and refine."

The key defendant in the Genentech case, Xanthe Lam, was ideally positioned to access this information. She had worked at Genentech for more than 30 years in various analytical departments related to drug development and regulatory affairs, and was a named author on at least 18 technical papers between 1995 and 2016. Her seniority gave her access to Genentech's secure document

repositories, according to the company's complaint.

The indictment against Lam and the other defendants lists 26 specific trade secrets passed to her husband, Allen Lam, another former Genentech employee who from 2013 became a consultant for JHL Biosciences, based in Zhubei City. The secrets listed included information on purity assays for Rituxan and Herceptin, identity assays for Avastin and Herceptin and sterility test procedures for Genentech products.

The current trade tariff war between the US and China and the rapid emergence of a number of biosimilar firms outside the USA, mainly in India, China, Taiwan or South Korea, may make the US federal authorities' involvement in the Genentech case particularly important for biotech companies. While civil actions can lead to effective legal redress within the US, their international reach is

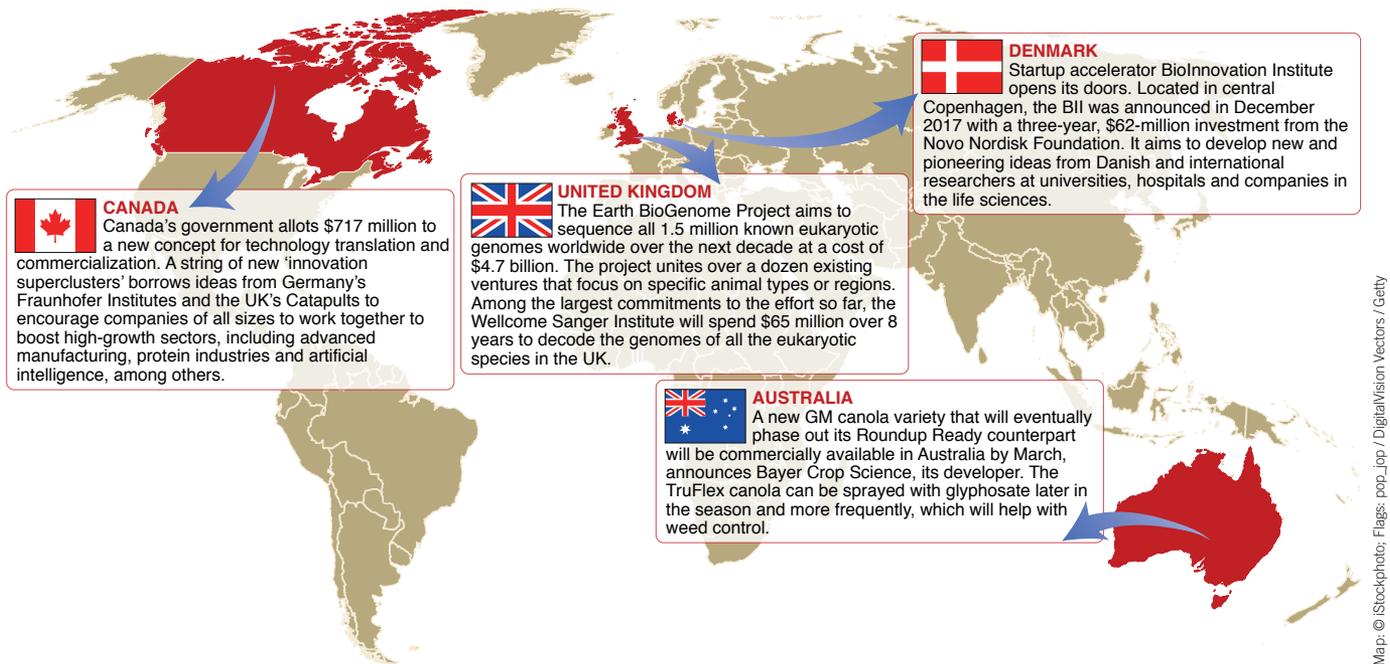
limited. "Outside of the US [...] it may be more difficult to obtain a meaningful legal remedy for the misuse of trade secrets," says Wicker.

China appears to be concentrating the mind of the attorney general's office. Fifteen out of 17 trade secret cases it highlighted in 2018 across all industries have focused on cases involving Chinese or Chinese-Americans. This contrasts with the picture in 2017, when that ratio was only 6 out of 18 cases.

Although the economic incentives to steal trade secrets clearly exist, they also highlight market opportunities. As Schroeder points out: "China is the second largest healthcare market in the world and soon to be number one. It may be worthwhile considering China as the primary market objective rather than the ultimate orchestrator of trade secret theft."

John Hodgson Cambridge, UK

Around the world in a month



“It has long been my goal to support innovative, breakthrough scientific research and to expedite the translation of scientific discovery into treatments and cures.” Soviet-born, British-American billionaire Sir Leonard Blavatnik's family foundation gave Harvard Medical School \$200 million for a translational center. (*Endpoints News*, 9 November 2018)

“It's 25 years after the discovery of the link between the *APOE* gene and Alzheimer's disease. Two copies of the e4 allele increase the risk of the disease by more than tenfold. But a treatment is nowhere near. It's not easy to believe in precision medicine.” Cecile Janssens, epidemiologist at Emory University in Atlanta (@cecilejanssens, 19 November 2018)

“Variation is the fount of all genetic knowledge. The more variation you have the better—so why not sequence everything?” Jenny Graves of La Trobe University in Melbourne, Australia, sums up the thinking behind the Earth BioGenome Project, which aims to sequence 1.5 million genomes at a cost of \$4.7 billion. (*Nature News*, 2 November 2018)