# TURNING POINT
Jimmy Lin

J. LIN

Jimmy Lin is a computational geneticist at Washington University in St Louis, Missouri, and founder of the Rare Genomics Institute (RGI), a non-profit group in Baltimore, Maryland. On 25 October, he was named as one of 25 fellows chosen to present an 'idea worth spreading' at the annual Technology Entertainment and Design (TED) conference, to be held in February and March in Long Beach, California. TED will help Lin to develop company strategies and brand recognition for the RGI.
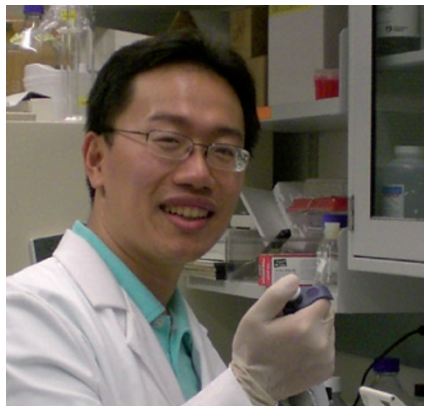
At one point you were pursuing four degrees at once. Why?

I'm in the MD–PhD programme at Johns Hopkins University in Baltimore because I'm interested in scientific discovery as well as health. I finished the PhD two years ago, and am finishing my MD this year. As a computational biologist, last year I earned a master of science degree in health sciences focused on bioinformatics. I am also fascinated with the intersection of science and faith. Through my church, I'm pursuing a master's in religion, exploring how the concepts of philosophy apply to medicine and bioethics.

Given how busy you are, why did you start the RGI?

Combining foolish optimism with a passion for using science to help people, some friends and I started this group six months ago. Estimates suggest that there are between 20 million and 30 million children with rare diseases, many of whom are undiagnosed despite exhaustive testing. A lot of these patients have had medical problems since birth that are probably genetic, but we need genome sequences to identify any culprit genes. Our goal is to determine whether these patients have a genetic disorder, and to come up with a diagnosis.

How are you pursuing an academic career while promoting the RGI?

At Washington, I am writing a next-generation sequencing programme for the clinic. I will be creating a screen for cancer and other diseases, checking the more than 20,000 coding genes in the human genome. I have yet to decide whether to pursue either a residency or a tenure-track academic position. The university has been kind enough to let me spend time on the RGI as part of my duties there.

What do you expect from the TED fellowship?

We are using a grass-roots, crowdsourcing approach to fund-raising — empowering the public to help these kids. Individuals can go online and contribute; for example, US$50 will pay to sequence roughly 600 genes. But we need to spread the word. I'm not yet good at public relations, but I am good at applying for fellowships. I thought that TED would be a great way to put this need in front of a lot of people, potentially the world. I was overjoyed when I heard that I had been selected. The fellows each have to make a 4-minute video describing their idea, to be shared at the conference and online.

What do you hope to accomplish in those 240 seconds?

I'm working on telling a good story — how meeting these patients has changed my life. I want to give viewers a taste of the desperation that these people feel with nowhere else to turn. Then I want to make it clear that science can potentially help. I need to bring that connection to life. But connecting the public to science through a grass-roots funding mechanism is the big idea we want to propel.

Are you concerned about how to balance your academic and non-profit pursuits?

I'm conscious that spending time on patient advocacy decreases the amount I spend on my academic career, specifically publications. I've chosen this path in part because I have had the privilege of working for scientists who pursue their own passions. That has motivated me to pursue mine, to bring technology to patients. Some people create technologies; I want to make those technologies accessible. I'm fine with giving up aspects of an academic career if I can have more of an impact on kids' lives. ∎

INTERVIEW BY VIRGINIA GEWIN

Foreigners more prolific

Foreign-born US scholars produce more publications than those born in the United States, but are less satisfied with their work lives, says a study in the *Journal of Higher Education* (D. Kim *et al. J. Higher Educ.* **82,** 720–747; 2011). Furthermore, foreign US faculty members who earned their undergraduate degrees in other countries are more productive than those who did so in the United States — but they are also less satisfied. The study gauged productivity on the basis of the number of research papers published over five years, using data from the US National Science Foundation's 2003 Survey of Doctorate Recipients. The authors speculate that only the "best and brightest" foreign scholars secure US faculty posts; or perhaps non-US scholars have better undergraduate training, especially in the sciences and maths.

Jobs in animal research

The Institute for Animal Health in Pirbright, UK, is recruiting about 15 early-career researchers in fields such as animal virology and avian disease. On 29 November, the institute announced that it is to receive at least £80 million (US$125 million) from the UK government, to augment a £100-million development project launched last year. The plans call for a high-containment lab and facilities for research and translation of research into disease-control products. Michael Johnson, head of the Pirbright laboratory, says that more positions may arise in the next 2 years. The labs should be completed by 2016.

Early–career boost

The European Commission's Horizon 2020 funding programme for 2014–20 will support about 110,000 research positions, the commission said on 30 November. The €80-billion (US$107-billion) scheme replaces final Framework Programme — FP7. It includes a 77% budget increase for the European Research Council (ERC) and a 21% increase for the Marie Curie Actions programme, which funds young researchers. Marie Curie Actions will raise the number of graduate students and postdocs it supports from 50,000 to 65,000. The ERC will fund some 9,500 principal investigators and 38,000 early-career researchers — almost twice as many scientists as under FP7.