

► accommodate researchers, says Zweig.

China's central government also seeds the growth of potential commercial hubs. Xiongan New Area, a collection of towns and fields 100 kilometres southwest of Beijing, was last April designated as a new economic area. There has been talk of universities moving or expanding to Xiongan as it grows into an industrial centre: local media have reported early interest from Peking University. He Lifeng of the National Development and Reform Commission, which is overseeing the Xiongan project, said that science and tech innovation would be promoted in the city, and it has been touted as a commercialization hub that will complement the existing R&D infrastructure in nearby Beijing. Chinese state media have trumpeted its future significance with comparisons to the successful Special Economic Zones of Shenzhen and Pudong New Area in Shanghai.

“THE WORLD DOESN'T REALLY KNOW JUST HOW ADVANCED CHINESE TECHNOLOGY IS.”

Although the focus of China's development has long been the east and southeast coastal regions, the Belt and Road trade-route initiative, which will link China with Central Asia and Europe, promises to open up China's west, where cleaner air and a lower cost of living could entice businesses. Chengdu, the capital of the central Sichuan province, has been courting high-tech manufacturing: 300 Fortune 500 companies already operate there. And the impoverished southwestern province of Guizhou has launched efforts to turn its capital,

Guiyang, and the surrounding area into China's 'Big Data Valley.' Tax incentives and government support have drawn Microsoft, Huawei, Hyundai Motor, Tencent, Qualcomm and Alibaba to set up offices in Guian New Area, a newly created urban and industrial zone an hour's drive from Guiyang, purpose-built to attract high-tech companies. The local government predicts that investment in the area will grow to \$3.34 billion this year and add 30,000 jobs. Learning outsourcing company NIIT, based in Gurugram, India, announced in January that it would conduct training at the site, aiming to recruit and train 2,000 candidates per year. The courses will cover areas such as big data, cloud computing and cyber security, and will place candidates inside companies and government departments.

“If you have missed the investment opportunity in Guangdong or Zhejiang 30 years ago, by no means should you miss that of Guizhou

today,” Jack Ma was quoted as saying by the newspaper *China Daily*.

It's a pattern seen again and again in the world's most populous nation. There will be many more Guiyangs and Shenzhens as China continues its long-term transition to innovation-driven development, pouring capital and resources into history's largest and most ambitious industrial modernization project. ■

Flynn Murphy is a freelance health and science reporter based in Beijing.

Q&A: WARWICK PEARMUND

Hong Kong-based associate director at Pure Search, an international recruitment firm.

What skills are Chinese companies looking for in outside talent?

It all comes down to data scientists. Whether mathematicians, statisticians or computer scientists. The rest of the world doesn't really know just how advanced Chinese technology is and how fast they can build businesses.

What gives potential recruits an edge?

Native Mandarin speakers who have either studied or worked overseas, particularly in Europe, the United States and Australia. In the last five years, it's noticeably changed — firms will say “bring us a native Mandarin speaker”.



What do people dislike about working in China?

I have a client who's finding it frustrating working for a Chinese firm having worked overseas. You don't have the same freedom to make a difference. There's a lot more structure and it's more rigid. **FM**

This interview has been edited for length and clarity.



CAIA IMAGE/LAMY

BREAKTHROUGH

SCIENTISTS REGENERATE LENS IN HUMAN EYE

Procedure removes damaged tissue to let stem cells grow.

BY JAMIE FULLERTON

In March 2016, it was revealed that a stem-cell therapy had given 12 Chinese infants suffering from cataracts the ability to see clearly (H. Lin *et al. Nature* **531**, 323–328; 2016). Lead scientist Kang Zhang, visiting professor at Sun Yat-sen University in Guangzhou and Sichuan University, said the regeneration of healthy lenses in children up to two years of age could be a paradigm shift in cataract surgery.

For five years, Chinese scientists worked in collaboration with researchers at the Shiley Eye Institute at the University of California in San Diego, where Zhang is a professor of ophthalmology, to develop a non-invasive surgical technique that can restore sight in just three months. During the procedure, surgeons remove the damaged lens from the patient but leave the lens epithelial stem cells intact. These grow and form a new lens to replace the old one.

Zhang says that conducting the clinical trials and tests on primates in China, rather than the United States, helped to keep costs low. He adds that attitudes towards animal testing in China, where animal rights protests are far rarer than in the United States, helped to move the research along quickly.

“If we were just doing it by ourselves in the United States it would have taken five to ten years,” he says. “We were able to accomplish it in two to three years.”

Praise came from around the world. Dusko Ilic, a stem-cell scientist at King's College London, called the research “one of the finest achievements in the field of regenerative medicine”, and “science at its best”.

Zhang says that further research using his team's techniques could further “harness a patient's own ability to regrow organs” in other areas of the body, such as the liver and brain. ■