

## China's spending on genetics research making huge advances in biotech

Years of pouring money into its laboratories, wooing scientists home from overseas and urging researchers to publish and patent is starting to give China a competitive edge in biotechnology, a strategic field it sees as ripe for “indigenous innovation.”

The vast resources China can throw at research and development – overall funding more than quadrupled to \$191 billion in 2005-13 and the Thousand Talents Program has repatriated scientists – allow China to jump quickly on promising new technologies, often first developed elsewhere.

These efforts were illustrated vividly in April – not without controversy – when scientists at Sun Yat-sen University in Guangzhou published results of a ground-breaking experiment to alter the DNA of human embryos using new CRISPR-Cas9 gene editing technology.

More than 50 Chinese institutions are patenting in the field, led by the Chinese Academy of Sciences, universities, the Anhui Academy of Agricultural Sciences and Beijing Jifulin Biotech. Nearly a fifth of the 518 families of gene editing patents analyzed since 2004 were associated with Chinese entities.

For top-tier institutions, “the level of available resources is incredible in terms of the freedom, the flexibility that gives key leading Chinese scientists to move very, very fast on a given research track if a new opportunity arises,” said James Wilsdon, professor of science and democracy at the University of Sussex.

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [China's big biotech bet starting to pay off](#)**