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▼ China's biotech experiments

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In China, biotech startups are struggling to make a go of it. But new models for survival are emerging.

Not everything is booming and blooming in China. Biotech research at public institutes might be growing, for example, but the government's growing interest in the field has not translated into boundless opportunities for biotech entrepreneurs.

Chinese pharmaceutical firms and venture capitalists (VCs), the leading financial catalysts for biotech startups elsewhere, remain curiously reluctant to support entrepreneurial efforts to turn the country's promising research into commercial products and viable biotech companies. Most of China's leading pharmaceutical companies are state owned and have no incentive to support the innovative drug research at a



SiBiono GenTech
SiBiono GenTech CEO Zhaohui
Peng: Is his message getting
through?

risky biotech startup. As for VCs, many familiar with China's VC community say that these domestic VCs lack the experience to judge the investment potential of biotech firms.

But Zhang Yu, vice-president of Beijing-based Double-crane Pharmaceutical, says that the basic reason for Chinese pharmaceutical companies' unwillingness to support new drug R&D is that they can't afford it.

"Most [Chinese] firms sell generic medicines and the competition pushes us to sell them cheaper. How can we have enough profit to support biotech R&D in the long term?" says Zhang, claiming the fact can hardly be changed over a short time. To complain about the unfriendly environment is useless, Qimin You, chairman and CEO of Hangzhou-based Ustar Biotechnologies, says. "You must try to tap every possible (funding) resource and design a very realistic business plan to get financing."

Entrepreneurs have little choice but to resort to some rather creative survival tactics. Zailin Yu, for example, president of Beijing-based Bioway-Fortune Research Center for Gene Drugs, attempts to attract foreign VCs with his public-funded research and the prospect of selling his new medicines to the US market. Bioway is majority owned by the government. The research center is majority owned by State-owned Bioway. The center is advancing a blood cell-stimulating drug that Yu himself helped develop.

However, "due to its own capital shortage, Bioway could not fund my research anymore," Yu says.

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He had to turn to the government for special supplementary funding of RMB 11 (\$1.36) million research funding from an assortment of government bodies that mainly support state-owned life sciences enterprises. Government backing for preclinical experiments is viewed as crucial validation for foreign VCs. If the medicine receives a new drug license in China, Yu will then initiate clinical trials for the medicine in the US. "Chinese government approval will be a very persuasive weapon to attract a new round of VCs to fund the research, which will push up the company's value and bring a better return to the first round of investors," Yu says.

Yu says later this month he will form with several South Korean VCs a joint venture holding company that will be registered in the Cayman Islands.

The foreign registration of a company often eases fears from investors concerned about getting their investment back. The Chinese government still controls foreign currency exchanges. This holding company will fully control a subordinate company registered in Beijing. The holding company will then infuse its capital—\$15 million is the goal—into the Beijing-based subordinate company. Then the Beijing company will outsource all the R&D of the targeted new drug to Bioway-Fortune Research Center. Through this design, the research center can enjoy both foreign capital and the benefits of state ownership.

Yu says both his technical platform—optimizing the protein structure of the existing drugs—and financing models can be used to bridge the gap between drug development in China and the US.

Although Yu put his eyes on international VCs, QiminYou turned to his old network of friends and former Wenzhou colleagues after he returned from Houston to start a business in China one year ago.

The Wenzhou people have long been known for their business acumen and their capacity to accumulate tremendous wealth, but they desperately need to upgrade their low-tech manufacturing industries.

"Unexpectedly, when I tried to seek capital from a real estate developer, his first condition was not about technologies but to ask me to sell my house and car in the United States and bring my family back to China," You says.

Jueying Chen, one of You's investors and the president of Shanghai-based Guangsi Investment and Development, explains: "I do not understand how high-tech You's business is, but I know the technology is done by people and we Wenzhouese are always apt to judge whether the related persons are reliable."

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"Dr. You has been successful in the United States, and we have no reason to question him if he could give up his base and belongings in the United States," Chen adds.

With about RMB 10 (\$1.2) million investment from several Wenzhouoriginated firms, You started Ustar in January this year with his partner, Lin Hu, another US-trained scientist. The company focuses on establishing RNAi libraries of 500 of the most therapeutically and commercially intriguing human genes and molecular diagnostic products, in which a gonorrhea PCR-ELISA test and a gonorrhea PCR-strip are under clinical trials.

"Besides the fellowship between my investors and me, another attraction (of my company) to the investors is that my business plan is modest and realistic," says You.

According to You, his RNAi library is a mature product that can be sold to Chinese and US research institutes to generate revenues. The money might not be big enough to make a profit, but it is enough to persuade the investors to continue their investment in clinical trials of the test strip. Meanwhile, the license for the diagnostic products is much easier to obtain than for new medicine. This also helps ease their worries about profitability.

Zhaohui Peng, chairman and CEO of Shenzhen-based startup, SiBiono GenTech, reckons he can survive entirely on public funding. In October 2003, his company obtained the world's first drug license for a gene therapy—recombinant Ad-p53 gene therapy for head and neck squamous cell carcinoma (HNSCC). HNSCC is a cancer that accounts for about 10% of the 2.5 million annual new cancer patients in China. Thus far, Peng has been successful. Nearly all of the RMB 80 (\$9.6) million funding for his research came from government bodies, public foundations and major universities.

"After returning in 1997 from the United States to launch SiBiono," Peng says, "I have been repeatedly trying to persuade officials and leaders that this is not a drug that only benefits me and my company. If successful, this product will benefit China and its biotech industry."

Beijing listened to Peng this time and invested in his project. This is a start, but if China wants a globally competitive biotech industry, more money and commitment is needed not just from the government but also from investors and pharma partners.

Web links

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