China moves to reform biotech policies

China is going to reform how public money from different government ministries is allocated to the biotech industry through the creation of a toplevel biotech leadership committee, to be launched by December 2004. Meanwhile, several government departments are drafting a national plan designed to provide direction to China's biotech sector in the next two decades. Critics say these measures, which are designed to better coordinate the nation's divergent endeavors in biotech and avoid duplication of efforts, will be effective only if the government introduces a better system to finance biotech research.

China's public budget to fund biotech research is currently distributed by various parties, such as the Ministry of Science and Technology (MOST), the Ministry of Health, military medical science departments, as well as universities headed by the Ministry of Education. All biotech research appropriations are subject to the approval of a single body: the Beijing-based National Development and Reform Commission (NDRC). China's biotech development is challenged by the lack of collaboration between these different departments, explains Hongxiang Zhang, editor-in-chief of the Journal of Chinese Biotechnology, in Beijing. And power-hungry officials from various related ministries struggle to keep much of the biotech pie under their remit.

To address such coordination problems, China's Science and Technology Minister Guanghua Xu announced, at the tenth International Symposium of the Society of Chinese Bioscientists in America (SCBA), held late in July in Beijing, the creation of a top-level leadership committee for national biotech development to harmonize the different ministries in the field of biotech research. "The move shows that the top leadership looks at the biotech sector as a core area of national scientific and economic development," Xu says. In China, leadership committees are powerful bodies that are formed either in sectors of strategic importance, or at times of urgent need, such as during the SARS outbreak last year.

But will the creation of this committee be enough to avoid duplication of efforts? Qihong Sun, a scientist with the Chinese Academy of Military Medical Sciences in Beijing, doubts whether a leadership committee is powerful enough to make



Chinese Science and Technology Minister Guanhua Xu has announced the creation of a biotech leadership committee to avoid duplication of efforts.

different government departments give up their struggle for the power to decide on the allocation of biotech funding.

There is no better proof of duplication of effort within the Chinese government than in the drafting of a new national development plan outlining the direction of the country's biotech sector over the next two decades. Whereas the Beijing-based NDRC is drafting one biotech development plan, MOST is also developing a separate national biotech scheme. The two plans are largely covering the same areas, according to Zhang, who participated in the drafting of both plans .

Whichever long-term biotech plan the government accepts will define key research areas to be supported by the government, the creation of new financing mechanisms and a more beneficial tax treatment to the biotech sector, Jingyu Bai, a department director of the powerful NDRC, told the China National Biotech Industry Development Conference held in Beijing on August 1. Although the plan will be finalized early next year, Bai refuses to reveal the details of the tax incentives. He promises only that the government funding of the biotech sector between 2006 and 2010 will be greatly increased from the previous funding period 2001-2005, which jumped by 400% compared to the 1998-2000 funding to reach RMB 10 (\$1.2) billion.

Despite the constant increase in the public biotech research budget, industry insiders are skeptical of the new raft of measures. Sun believes that the biotech reshuffling measures do not reform the public biotech funding system, which may still be dominated by a few powerful officials and remain less transparent and participatory.

However, Hongguang Wang, director of the China National Center for Biotechnology Development, in Beijing, hopes that the creation of a nationwide biotech industry association in 2005, which was announced by Xu at the SCBA meeting, will solve the problem gradually. The association is expected to lobby the government to give up its old, duplicative funding style. Introducing an industry body may not be straightforward, however. In China, the government strictly controls national industry associations, which need to be affiliated with a particular government department to exist. Until now, no such national biotech association has been established partly because the sector is very young and also because several ministries would struggle to gain control of it, according to Zhang. In addition, the private sector is not encouraged to organize stronger national associations that would emerge from pooling the local associations such as those in Shanghai and Beijing.

Hepeng Jia, Beijing