

Biotech Booms in the Yangtze River Valley

A look at forces shaping the course of biotech growth in China

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Comparable to the natural forces that relentlessly push the water originating in the Himalayas down the Yangtze to the sea, government and market forces are driving the forward momentum of China's innovative biotech sector. On a recent trip to China, I was excited to see that pharmaceutical and biotech industry segments are booming, yet there are numerous opportunities and challenges associated with such a positive situation.

Determined to become a global player in the pharmaceutical market, China's government has provided biotech capital and eased regulatory burdens over the past few years, while an infusion of approximately \$7 billion in venture capital in 2018 coupled with major pharma investments served to stir up the country's biotech market. These actions influenced CROs as well.

The cumulative effect of these actions is beginning to pay off, as evidenced by the massive growth in clinical trial authorizations from China's National Medical Products Administration (NMPA) for innovative assets. In 2015, NMPA implemented a series of regulatory reforms that have shortened clinical trial IND approval timelines from up to 12 months in 2016 to less than three months by the end of 2018. With that increased activity comes an equivalent demand for experienced professionals. These pressures bring recruitment and retention considerations to the forefront for China's life sciences sector.

It's only necessary to look at the intense competition for talent across Boston's Charles River in Cambridge or in the San Francisco Bay area to observe a similar demand. Without a strategy to bolster the talent pipeline, a business could engage in an unproductive "feeding frenzy" that wastes time and resources.

People drive quality

Robust processes and systems mean little without the right people to oversee and execute daily tasks. Experienced leaders and teams are necessary to produce quality results, and, as CROs have experienced, the biotech talent pool should

be managed to recruit and retain the top talent. Recruiting strategies should factor in the nuanced dynamic of China's labor force relating to repatriation, attracting young Chinese graduates with technical and problem-solving abilities and empowering experienced leaders attracted by entrepreneurial opportunities.^{1,2,3}

Leadership on the ground

Reflecting on what I witnessed in China and routinely hear from clients and partners, a talent strategy should include the objective of putting experienced and accountable leaders in place locally to most efficiently and effectively manage operations. Local leaders should be trained and granted decision-making authority to operate and resolve issues in "real time." This is critical on the CRO side, where it's extremely valuable to have local decision-makers engaging with biotech and pharma on a regional and global scale.

Global regulatory knowledge and clinical development expertise are sought-after commodities in China as biotechs seek global clinical trial participation. Such knowledge is especially powerful when it's paired with local regulatory insight, so teams can understand how their development is positioned with trials outside China.

China has a high-quality, globally focused drug development market with major ambitions. Currently, much of the strength is in preclinical and manufacturing, but expertise in project management, clinical, regulatory and product development is growing.

Shaping the course

The career arcs, life styles and diverse motivations of Chinese talent should be considered part of the recruiting equation. A number of professionals are drawn to multinational CROs because of their ambition to become part of the global drug development workforce. Exposure to international standards in quality processes, management practices and digital innovations that will propel their career forward is a significant driver. At the same time, senior-level leaders at global companies are becoming

increasingly attracted to the allure of smaller biotech companies that are beginning to offer more creative compensation packages and greater decision-making authority.

On the other hand, many young Chinese graduates are enticed to work in top-tier cities like Shanghai or Beijing, but the nation's "hukou" system (China's family registration system) and extreme housing costs in tier-one cities often compel professionals to return to their hometowns. In our area of drug development, this means the semi-nomadic CRA life style loses its appeal. These professionals won't be motivated merely by high salaries. Instead, personal empowerment, growth opportunities, the right lifestyle fit and satisfying entrepreneurial desire to affect change could be considered more of an inducement.

Another way to strengthen the talent pipeline is to expand networking and academic partnerships both in the U.S. and China. Networking through university life science and biotech cooperatives can attract the technically talented, and budding entrepreneurs may find fast-track entrepreneurial programs appealing.

China leads the world in sending its citizens abroad for higher education.⁴ It would appear that a critical repatriated mass is now returning to develop new enterprises, but such is the nature of competition and market forces.

In "The Art of War," Sun Tzu stated that, "Water shapes its course according to the nature of the ground over which it flows." There are forces now at work shaping the forward momentum of China's biotech industry. On the ground, opportunities and challenges will ultimately define its course. **CP**

References

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