Interview with Yu Peng, President, China Medicinal Biotech Association (CMBA)

05.04.2012

Tags: China Medicinal Biotech Association (CMBA)

Could you please give us a brief introduction on CMBA?

First and most obviously for new arrivals to our office, since 2011 we have changed locations, making it more convenient for companies to come here and benefit from the opportunities we can provide our members. CMBA's membership now totals 205 corporate members and 19 substitutes, with a focus on pharmaceutical and biotechnologies. There are many changes coming from the development of Chinese biotechnology. I would like to take a moment to talk about the national medium -term & long-term plan for the development of science and technology, published by the China State Council in 2006, in effect from 2006 till 2020.

Biotechnology is one of the key areas in the plan, which includes targets discovery, plant and animal species and drug design, genetic manipulation and protein engineering, human stem cell-based tissue engineering, and next generation industrial biotechnology. In light of the plan, we have two tasks on medicines: new drug innovation, and HIV and viral Hepatitis prevention and control. This plan involves pharmaceutical development and capital support. In the twelfth five-year plan, the China government has identified the need to establish the innovative systems with the enterprises as the main body to drive innovation in areas such as biotech, chemical medicines, modern traditional medicine, advanced medical equipments and packing materials, accessories and pharmaceutical equipments. When CMBA was founded, most of our members were all from institutes and hospitals, whereas now most of them come from enterprises.

In the field of biotechnology, we should develop monoclonal antibodies and vaccines, gene medicines and polypeptide drugs, pay attention to nucleic acid medicine, gene-therapy and stem cell products. Besides, we should redevelop those traditional medicines which have obvious advantages in curing diseases.

In terms of changes since 2009 there have been a number of innovations. One is the academic Fu Xiaobing who has pioneered skin grafts with sweat glands using the Cell Regeneration Technology. Another academic named Zhou Qi from the Chinese Academy of Sciences fostered a rat with live and reproduction ability with IPS, a multi-potent stem cell and four-time Body Blast sphere injection. The gene vaccine emerged in China in 1991. Now we have the producing technology and regulating system for vaccines which basically matches international universal standards. And the government approved a gene therapy drug, named recombinant human Ad-53 injection . We have found the biological macromolecular proteins with drug targets function characteristics. The biotech chips have also been approved.

Since 1995, biotechnology and the biotech industry have developed at an ever-increasing rate. In the genomics, clone, tissue and organ engineering, gene therapy and biochips have caught up with world-leading standards. Biotechnology has played a more important role in diagnosing and curing complex diseases. China is the largest vaccine producing and consuming country in the world. We have more than 60 vaccine producing factories, and 58 categories of vaccines, which can prevent 32 infectious diseases, as well as gene engineering products. Apart from gene engineering antibodies and gene engineering vaccines, 20 new products will emerge in market, 10 of which are domestically-invented. We have 43 blood product factories with 12 blood products, and 123 biological diagnosing reagent factories.

Thus, we can say we have a considerable scale of Chinese pharmaceutical and biotech industry which is developing really fast. Some of the products have been exported, such as high flux chips and vaccines. However, most of the companies are small and medium-sized enterprises and still lack strong international competitiveness. I believe there will be great results since Chinese government pays so much attention to the sector in the 12th five-year plan and the national medium-term & long-term plan. Chinese government has given capital support to more than 20 biotech industry bases. And many associations, like CMBA, organize the companies from the whole value chain, including research institutes, colleges and factories, etc., and we built information touch with our members. We send a weekly newsletters to each member, which covers the latest news on the domestic and foreign biotech development. Our magazine is received by our members every two months. Besides, we have more than 20 seminars and conferences annually. CMBA also has another obligation, to provide suggestions to government as the representatives of our members. At the same time, we draw up our code of conduct for our members. For instance, we have a standard on biobank, which is the universal code of this sector, even though there is not

a national standard. What's more, we organize personnel training. For example, we gathered pharmaceutical workers to attend domestic and abroad trainning on how to secure quality and safety. We promote the development of Chinese biotechnology and serve the members and the industry. Some of our members receive state governments and companies from other countries and communicate with them directly. But CMBA hasn't established such kind of exchange programme yet. I hope we can be introduced to the international community and then we can expect the common ground and partnership possibility with international companies and institutes.

You mentioned international collaborations both between CMBA and institutions and Members. How important it is to have strong links between international community and members?

Since the policy of reform and opening up was established, the government has sent many students to study abroad. So now we have some communication basis. Recently, more students have learned abroad at their own expense. When they come back, they can combine foreign advanced technologies with China's reality and benefit Chinese people. Many development zones in China provide attractive policies for those students. Just last year, 7 students returned from Harvard and founded their own company working on a drug curing high blood pressure. Now the drug has been released to clinical practice. Another example is about the human genome project, in which China bore 1% of the workload. Such kind of international cooperation will increase our working experience and expand our horizons. Overall, I think we should focus more on specific international cooperation.

Most of the members of CMBA are smaller or medium-sized enterprises. Although they advance very quickly, they still lack in the international competitiveness. What it takes to bring those companies up to next level? What are the biggest challenges and how are the companies are going to overcome them?

CMBA's small and medium-sized companies are focused on one project or one field. Recently, several mergers and acquisitions have occurred amongst our members. We have more than 23 companies going public now, in Shanghai, Shenzhen, Hong Kong or the US. But compared with those multinational companies, we are still small-sized. I think the reason is that it is difficult for Chinese companies to "go-out" and master international markets. So we need international cooperation. Many of those companies have a strong capability of producing facilities and can support a larger market. What we lack now is the experience of going abroad and capital support.

As the final message to the readers to the Pharmaceutical executives, what would you like them to know about CMBA or biotechnology in China?

CMBA is a platform to promote communication in this industry worldwide, with the end goal to benefit human beings. And our goal is to have more people benefit from our research. We have a

parterner, Cancer Foundation of China, who provides molecule-targeting treatment medicine and supported by some multinational companies. It is not only meaningful to do research when people can afford it, and now, this foundation can provide medicines free or at lower prices, which will further promote the communication between other countries and China, to the betterment of the human health worldwide.

See more interviews