

OPPORTUNITIES & CHALLENGES IN BIOMEDICAL R&D IN CHINA

Reported by Janet Xiao and Tao Huang

In keeping pace with the growing interests in biomedical research and technology resources in China, the 2006 SAPA-West Business Forum, “Opportunities and Challenges of Biomedical and Research Development in China,” was held on October 29, 2006 at Fenwick & West LLP in Mountain View, California. The business forum was designed to facilitate a snapshot of the current biomedical R&D landscape from four critical perspectives: R&D, Clinical, Finance, and Patent Strategy by subject matter experts and leaders of respective fields. The business forum was highly charged with information and stimulating discussions. Kudos to great efforts of the organizing committee and generosity of the guest speakers with their time, the event was an overwhelming success. More than 100 members attended the event.



Jing-Shan Hu, Ph.D., *President of SAPA-West and Head of the Functional Biology Dept in Genetics & Genomics division of Roche, Palo Alto, delivered opening remarks at the forum. Highlights of the forum are as followed.*

About R&D

Li Chen, Ph.D., Chief Scientific Officer and Head of Research at Roche R&D Center in China, gave a presentation on the topic of “Limited Drug Discovery in China: An Emerging Landscape.” He provided a historical perspective of Roche’s venture into China, including the initial set up of a joint venture and the subsequent building of a wholly owned R&D center in Shanghai. He also discussed China’s pharmaceutical industry and highlighted the business strategies in China of major international pharmaceutical companies such as Roche and Eli Lilly.



Dr. Chen is responsible for the drug discovery research strategy and operation in China. He is also a member of Roche Global Chemistry team and Board of Directors of Roche R&D Center (China) Ltd. Li joined Roche Nutley Research Center (USA) in 1992 after his Ph.D in Chemistry from Iowa State University and had several managerial positions in PR&D Nutley. He is co-inventors of two Roche drugs currently in Phase II trial. Li is a member of Board of Directors of SAPA West and Scientific Committee of the Chemogenomic Lab at Peking University.

About Clinical Research

Mr. Mark Engel, Chairman and co-founder of Excel Pharma Studies, gave a presentation on the topic of “China Clinical Research Organizations - Current State and Projected Future.” Mr. Engel, who has spent more than a decade in China, started his presentation by sharing a vivid personal story about his initial experiences dealing with the Chinese SFDA (State Food and Drug Administration) in the early 1990s. Mr. Engel then went on to highlight the dramatic evolution and progresses within the Chinese SFDA and the regulations governing clinical research industry over the past decade from the perspective of an organically grown Clinical Research Organizations (CRO) in China. He discussed the many advantages of conducting clinical researches in China, including the abundance of naïve patients and the high quality of the collected data due to close involvement of experienced investigators in the trials at a fraction of the cost of conducting similar trial in the U.S. He also stressed the conflict of interest issues centering on the fact that most investigators advising the government on drug approval are also physicians who would prescribe the drugs once they were approved.



Mark Engel, *Chairman, Excel Pharma Studies* is the co-founder of Excel Pharma Studies, the largest full service CRO in China with operations in Beijing, Shanghai, Guangzhou, Chengdu, Chongqing, Nanjing, and Shenyang. In the last two years, Excel has been involved in approximately 110 phase I-IV trials in 25 cities at over 130 hospitals and covering approximately 23,000 patients. Mr. Engle is also the co-founder of several other medically related companies in China: Haoyisheng and The Tiger Group of companies, including Tiger Medical Products, Tiger Health Care Group, Tiger Specialty Sourcing, and TPNT.

About Finance

Jonathan Wang, MBA, Ph.D., General Manger of Burrill & Co., Great China, discussed biomedical research development in China from a business perspective. In his presentation, “China Life Sciences in A Global Landscape: Today and Tomorrow” Dr. Wang provided an overview of a traditional drug development paradigm. He informed the widening of the Pharma Innovation Gap between the skyrocketing cost in drug research and development and the flattening/decreasing number of new drug approvals. He stated that China has the comparative advantage of low input costs and should continue to leverage such advantage to attract pharmaceutical R&D and manufacturing. Viewing India as China’s comparable competitor for the same market, he recommended that China should move from supplying mere raw materials to more profit lucrative sectors such as manufacturing of active pharmaceutical ingredients (APIs) and generic drugs. Dr. Wang is highly optimistic about the many promising opportunities within the life sciences industry in China.

About Patent Strategy

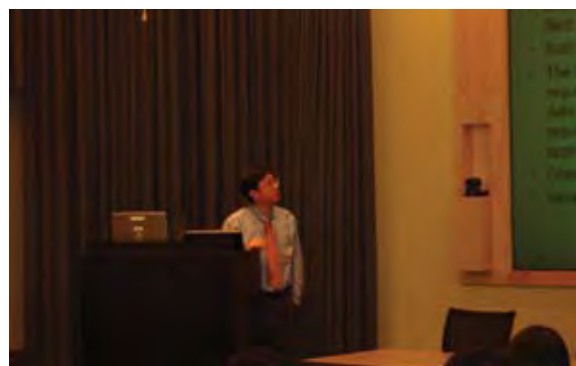
In his presentation entitled “Coherent Patent Strategy for Protecting Biotech Inventions in China and the U.S.” Dr. Peng Chen, a partner at Morrison & Foerster LLP, discussed biomedical research and development in China from a legal perspective. Focusing on intellectual property protection in Chinese life science innovations, Dr. Chen provided a comprehensive comparison between Chinese and U.S. patent law and

highlighted strategic issues to be considered when developing biomedical products in China.

This forum was organized by Dr. Janet Xiao, Chair of the Business and Career Development Committee of SAPA-West and an attorney at Morrison & Foerster LLP in Palo Alto. Sincere thanks Fenwick & West LLP and Dorsey & Whitney LLP for sponsoring this event. The SAPA-West Business and Career Development Committee strive to bring more high quality events to meet our members’ business and career development needs.



Jonathan Wang, MBA, Ph.D. *As the General Manager (Greater China) at Burrill & Co.*, Dr. Wang leads the firm’s Greater China-related businesses. Prior to Burrill, he was the Managing Director for WI Harper Group and Walden International, both ranked among the top ten global venture capital firms operating in China. He has co-founded many companies. Dr. Wang holds a Ph.D. in Molecular Neurobiology from Columbia University. He obtained his scientific training under the supervision of Dr. Eric Kandel, a Nobel Laureate, and was awarded Howard Hughes Medical Institute (HHMI) Research Fellowship. He also holds an M.B.A. from Stanford University.



Peng Chen, J.D., Ph.D. *is a partner of Morrison & Foerster, LLP in San Diego.* He specializes in patent prosecution, client counseling, opinions and litigation in all fields of the biotechnology, diagnostic and pharmaceutical industries. He received his Ph.D. from the Johns Hopkins University School of Medicine and J.D. from Columbia University.