

## ICGC launches four new projects in China

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### ICGC launches four projects in China to identify new genomic drivers for cancer



**Singapore:** The International Cancer Genome Consortium (ICGC) announced four new projects in China to identify the genomic drivers in colorectal, esophageal, liver and nasopharyngeal cancers, helping lay the foundation for developing treatments tailored to patients' individual needs. China is a founding member of the ICGC, having launched a gastric cancer project in 2008.

The consortium leads worldwide efforts to map the genomes of both common and rare cancers and has the goal of identifying cancer-causing mutations in more than 25,000 tumors representing more than 50 types of cancer of clinical and societal importance across the globe.

The Chinese Cancer Genome Consortium's collaborative projects span a network of more than 200 researchers with expertise in next-generation genetic sequencing and have the bioinformatics skills to uncover the complex causes of cancer. Investigators for the four new projects are distributed among 20 hospitals and institutes (listed below) in 13 cities, including Beijing, Shanghai Guangzhou, Shenzhen, and Hong Kong.

The new projects emphasize cancer types that are more common in China than the rest of the world. Examples are gastric cancer, esophageal and liver cancers, which occur more than twice as often in China as the rest of the world. Nasopharyngeal cancers occur 70 per cent more often in China.

Dr Xuetao Cao and Dr Xuemin Zhang will oversee the four new projects which will be scientifically steered by Dr Youyong Lu and Dr Huanming Yang. Dr Xiuqing Zhang will coordinate the projects in collaboration with prominent scientists from universities or institutes and medical centers in China.

Cancer is now the leading cause of death in China, implicated in nearly a quarter of all deaths countrywide, and the incidence of cancer in China has been increasing rapidly. Currently, about 2.7 million people are diagnosed with cancer annually and 1.9 million patients die of the disease. The significant investment in cancer genomics in China will enable researchers to mine genetic and lifestyle differences between Caucasian and Asian cancer patients. Comparisons will be possible with current

ICGC projects in esophageal, liver and colorectal cancers led by teams in France, Japan, the United Kingdom and the US.

"It is our great pleasure to solidify China's important role in the ICGC. We believe that more genomic data from Asian cancer patients will augment the work of existing ICGC cancer projects and promote progress toward making cancer a manageable condition," said Dr Huanming Yang of the Chinese Cancer Genome Consortium.

"It is thrilling to see cooperation among researchers advancing knowledge in cancer genomics and their collective effort and data driving momentum to improve the health and well-being of patients worldwide," said Dr Tom Hudson, president and scientific director of the Ontario Institute for Cancer Research and one of the founders of the ICGC.

As of December 2012, the ICGC has received commitments from funding organizations in Asia, Australia, Europe and North America for 51 project teams in 15 jurisdictions to study more than 25,000 tumor genomes.

The ICGC, which comprises research organizations around the world, is committed to making data rapidly and freely available. Each ICGC project team is conducting a comprehensive, high-resolution analysis of the full range of genomic changes in at least one specific type or subtype of cancer, with studies built around common standards of data collection and analysis.

"Researchers using this data will increase opportunities to deliver more precise diagnostic tests for the clinical management of patients in China and around the world," said Dr Youyong Lu, professor and director, Laboratory of Molecular Oncology, Beijing Cancer Hospital or Institute.