

The First Chinese Genome Published in <Nature>



The latest edition of the journal Nature reports on scientists' progress in mapping the Han Chinese genome, entitled "The diploid genome sequence of an Asian individual" with about 120 scientists listed as co-authors. The sequencing is the first for a Han Chinese and the third for humans overall.

The genome was sequenced to 36-fold average coverage using massively parallel sequencing technology and assembled as a high-quality consensus sequence for 92% of the Asian individual's genome. Approximately 3 million single-nucleotide polymorphisms (SNPs) inside this region were identified. The authors also carried out heterozygote phasing and haplotype prediction against HapMap CHB and JPT haplotypes (Chinese and Japanese, respectively), sequence comparison with

the two available individual genomes (J. D. Watson and J. C. Venter), and structural variation identification. These variations were considered for their potential biological impact. The sequence data and analyses demonstrate the potential usefulness of next-generation sequencing technologies for personal genomics.



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emperors who are considered to be the ancestors of the Han ethnic group, will map the genomes of 100 individual Chinese. The first donor is a researcher. They hope that the rest of the group will be volunteers who want to have their genomes sequenced for purely scientific purposes. Wang said it was necessary to create the database to solve problems involving Chinese-specific genetic diseases. "It will also give us a solid foundation for individual health care in terms of accurate and effective diagnosis, prediction and therapy," he said.

Felix Cheung, a representative of the Nature Publishing Group praised their achievements at a press conference in Shenzhen. "The work is important because it demonstrates the utility of next-generation genome sequencing technology and illustrates the potential of personal genomics in disease diagnosis," said Cheung. Also, "It's a representative of an ethnic group that accounts for nearly 30 percent of the human population," he said.

According to Dr Jian Wang, the "Yanhuang Project", named after two legendary ancient