

## The Guangzhou Biobank Cohort Study (GBCS)



The Guangzhou Biobank Cohort Study (GBCS) is a collaborative research project between The Universities of Birmingham and Hong Kong, and The Guangzhou Occupational Diseases Prevention and Treatment Centre in China.

The study commenced in October 2003 and is recruiting men and women over the age of 50, from a city in southern China (Guangzhou) - a population that has undergone rapid economic transition. So far about 30,000 participants have been recruited. Participants undergo detailed baseline characterization and phenotypic assessment, with storage of their genetic materials.

The main long term aim of the study is to examine the effects of genetic and environmental influences on health and chronic disease development (particularly circulatory disease, chronic respiratory disease, cancer and dementia). In the shorter term, cross-sectional analyses have identified a number of important findings, which have resulted in a number of publications.

In addition, three large disease cohorts on CVD (details below), COPD and diabetes mellitus are being established from this study

Details on study design can be found in the following published cohort profile: <http://ije.oxfordjournals.org/cgi/reprint/35/4/844> (<http://ije.oxfordjournals.org/cgi/reprint/35/4/844>)

One of our papers, published in The Lancet, was among the twelve nominations for the Lancet's Paper of the Year 2007. The nominations comprised papers published by journals including Nature, Science, New England Journal of Medicine as well as The Lancet and were considered to be papers that 'make the greatest potential contribution to clinical research' in 2007.

We welcome inquiries from prospective PhD students who are interested in working on this project.

### List of papers from GBCS...

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Over 70 papers have been published since 2006. An update list of papers from this study can be accessed from PubMed (<http://www.ncbi.nlm.nih.gov/sites/entrez>) (<http://www.ncbi.nlm.nih.gov/sites/entrez>) with "Guangzhou Biobank" as the search item.

### The Guangzhou Biobank Cohort Study-Cardiovascular Disease subcohort (GBCS-CVD)

The Guangzhou Biobank Cohort Study-Cardiovascular Disease subcohort (GBCS-CVD) is an extension of the GBCS, a collaborative research project between The Universities of Birmingham and Hong Kong, and The Guangzhou Occupational Diseases Prevention and Treatment Centre in China.

The Subcohort consists of 2000 participants who have been intensively phenotyped including a range of surrogate markers of vascular disease, including carotid artery intima-media thickness, cerebral artery stenoses, arterial stiffness, ankle-to-brachial blood pressure index and albuminuria, as well as coagulatory and inflammatory markers. Plasma and leukocytes are stored in liquid nitrogen for future studies.

Details on study design can be found in the following published cohort profile: <http://www.nature.com/jhh/journal/v24/n2/pdf/jhh200952a.pdf> (<http://www.nature.com/jhh/journal/v24/n2/pdf/jhh200952a.pdf>)

Given the comprehensive characterization of demographic and psychosocial determinants and biochemistry, the study provides a unique platform for multidisciplinary collaboration in a highly dynamic setting.

We welcome inquiries from prospective PhD students who are interested in working on this project.

### List of papers from GBCS-CVD...

An update list of papers from this study can be accessed from PubMed (<http://www.ncbi.nlm.nih.gov/sites/entrez>) (<http://www.ncbi.nlm.nih.gov/sites/entrez>) with "Guangzhou Biobank CVD" as the search item.