New Population Study on Eye Diseases in Chinese and Indians

Prof. Wong Tien Yin of Ophthalmology Department, NUS, and Deputy Director of Singapore Eye Research Institute has been awarded a research grant of $2,272,200 from the Biomedical Research Council which covers a period of three years from June 2008 to May 2011.

The grant will fund the Singapore Indian Chinese Cohort (SICC) Eye Study, a population-based study aimed at determining the frequency, risk factors, and impact of eye diseases in 3,300 Indian and 3,300 Chinese Singaporeans. This study is an extension of the Singapore Malay Eye Study (SiMES), which successfully recruited and examined 3,280 Malay Singaporeans aged 40-80 years from 2004-2006. SiMES has allowed an in-depth understanding of the prevalence of different eye diseases in Singaporean Malays, including new vascular and genetic risk factors for eye diseases. To date, SiMES has resulted in 34 papers in peer-reviewed journals, including 13 in Tier 1 journal.

The new study SICC will now examine eye diseases in Indians and Chinese persons and will not only be aligned not only to SiMES but also to other similar cohorts in US, India and China.

Working with a team comprising local and international researchers and collaborators (NUS, SERI, major hospitals, A*STAR research institutes, Duke-GMS, Ministry of Health, University of Sydney, University of Melbourne, Moorfield’s Eye Hospital, University of Wisconsin-Madison and John Hopkins University), SICC and SiMES will ultimately provide information to allow direct comparison of data across three Asian ethnic groups. Participants will have a detailed systemic and ocular assessments, state-of-the-art digital lens, retinal and optic disc imaging, and collection of blood and DNA for future biomarker and genetic studies. Finally, novel techniques we have developed in retinal image-analysis will now be used in assessing risk of not only eye diseases, but also cardio-metabolic conditions.

SICC with SiMES will therefore examine a cohort of 10,000 persons representing the three main ethnic groups in Asia (Chinese, Indians and Malays) representing more than half of the world’s population.