The University of Nottingham Malaysia Campus/Cancer Research Malaysia

JOB TITLE: Post-Master Scientist (Genetic Statistician/Applied Statistician)

LOCATION: Department of Applied Mathematics @ The University of

Nottingham Malaysia Campus; and

Cancer Research Malaysia @ SJMC, Subang Jaya

RESPONSIBLE TO: Group Leader (Breast Cancer Research) @ Cancer Research Malaysia

Date: As soon as possible, from 1 Sep 2016

Scope / Purpose of Job:

The University of Nottingham Malaysia and Cancer Research Malaysia seek to appoint talented genetic statistician/applied statistician who is interested in joining internationally recognized large-scale studies of breast cancer. This position can be filled by appropriate candidate at junior or senior levels, depending on relevant qualification and experience.

The role holder will work on the Malaysia Breast Cancer genetic (MyBrCa) study, which is one of the largest breast cancer cohorts in Asia. MyBrCa study is also part of Breast Cancer Association Consortium (BCAC), which seeks to identify new breast cancer genetic susceptibility variants through Genome-Wide association studies (GWAS). The main responsibilities of this role will be to: implement analysis of large-scale genetic dataset in relation to breast cancer and related risk factors; manage, clean and prepare genetic data for analyses; develop population-specific risk prediction models using genetic and clinical factors. Such analyses will lead to internationally unique insights into the heritability basis of breast cancer, the leading cause of cancer-related death in Malaysia, providing opportunities for disease prevention and medicines development.

Key responsibilities:

- (a) Conduct methodologically appropriate statistical analyses for large-scale genetic dataset using genetic analysis software (e.g. PLINK, SNPTEST, METAL) or standard statistical software (e.g. R or Stata)
- (b) Working with epidemiologist and statisticians in the team to plan and implement analyses on developing population-specific risk prediction models using common breast cancer genetic variants and related risk factors
- (c) Writing and developing bespoke programs for data analysis, integration and retrieval using statistical software (e.g. R or Stata) and/or scripting environments (eg, R, Perl, C++) for use within the team.
- (d) Ensuring all genetic data are appropriately stored, updated and transferred to enable statistical analyses to be conducted.
- (e) Working closely with the team to help interpret findings and draft manuscripts and other reports for publication.
- (f) To ensure that research programmes meet external and internal milestones, and to be responsible for drafting and submitting the necessary reports.
- (g) To supervise research associates, students and other internal as well as external scientists, as and when required

Person specifications:

Essential knowledge, skills and experience

- 1. Educated to post-graduate degree level (Master) in genetics, genetic epidemiology, biostatistics, medical statistics or other relevant qualification
- 2. A sound understanding of statistical concepts and a working knowledge of genetics, preferably in relation to cancer disease
- 3. Strong organizational and interpersonal skills
- 4. Excellent verbal and written communication skills
- 5. Experience of using Microsoft office, relevant statistical software (e.g. R, Stata or PLINK)
- 6. Ability to judge priorities and work to tight deadlines
- 7. Adopts a pro-active attitude to work
- 8. Ability to work to targets both independently and within a team environment
- 9. Ability to work in multi-disciplinary team

Desirable knowledge, skills and experience

- 1. At least one year of relevant work experience
- 2. Experience of analyzing large-scale genetic dataset (e.g. GWAS)
- 3. Knowledge of working in Linux-based operating system
- 4. Previous scripting experience
- 5. A track record of authoring scientific publications
- 6. Ability to assimilate rapidly new scientific, medical and statistical concepts (eg, new software packages)
- 7. Ability to communicate ideas to peers and non-statisticians