Title: East Asian Parkinson Disease Genomics Consortium

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It is well known that majority of research studies, genetics included, are based on population of European ancestry. [1] There are many explanations, especially socio-economic. Nevertheless, missing population diversity leads to incomplete understanding of disease mechanisms, less appropriate translation research findings from European ancestry to other less-studied populations, and diverse populations can help to fine map the genetic loci.[2] The same is happening in Parkinson's disease (PD) studies.[3]

The International Parkinson Disease Genomics Consortium (IPDGC) recognised this imbalance in scientific research and data. Hence, in 2018, IPDGC proposed targeted efforts should be made to study the underrepresented populations. The IPDGC-Asia or East Asian Parkinson Disease Genomics Consortium (EAPDGC) working group was subsequently formed. Another group is the IPDGC-Africa.[4]

EAPDGC aims to recruit an East Asian-based cohort of over 5500 Parkinson's disease patients and 4500 controls, and extend this Consortium on future collaborations on other PD-related diseases, prospective clinical studies and trials. The initial emphasis will be on the role of genetic risk factors of PD in East Asians, comparing the findings with European ancestry and other populations, and the genetic factors in various phenotypes, e.g. onset age, potential subtypes.

The Consortium will enable research development among various sites, through intra-Consortium exchanges and organisations outside the Consortium, including IPDGC and the Global Parkinson's Genetic Program.[5] We take priority in translating the findings to application in the local populations, and support distribution of educational materials and research tools in local languages to patients, health workers, and scientists.

Currently we have participating academic and clinical centres (supplementary) in cities from Asia Pacific: Seoul, Tokyo, Chengdu, Changsha, Taipei, Hong Kong, Hanoi, Kuala Lumpur, Perth, Europe: London and North America: Bethesda. We now have over half of the targeted recruitment ready for genotyping. Given time, we believe the final cohort size will out-number the current target. We are still actively looking for collaborative PD centres to join our Consortium and shall collaborate with other groups that work in neurodegenerative diseases.

(325 words)

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References

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