EXPANDING GENOMIC RESEARCH TO INCLUDE ETHNIC MINORITIES REVEALS CREATER HUMAN DIVERSITY

The UK Biobank project is one of the largest human population genomic studies, done on 500,000 individuals. However, approximately 88% of these are people of European ancestry.

A similar project is underway in the United States ("All of us" project). The researchers have recently published their first results in Nature (1, 1b). The number of people included in this publication (245,000) is less than half of that in the UK Biobank study, but 46% of them belong to minority ethnic groups. The ethnic minorities have contributed substantially to the total of 275 million new genetic variants.

These results parallel the recent data on Australian indigenous people (2, 2b). The number of individuals analyzed is very small (159 individuals), but demographic history, including early divergence from the Papua New Guinea (about 47,000 years ago) and Eurasian groups, has generated a substantial percentage of variation that is not observed in global reference panels or clinical datasets

Please note: 'b' in the references refers to a comment by NATURE (under 'news') on the original article; it also constitutes a good summary.

- (1) https://www.nature.com/articles/s41586-023-06957-x
- (1b) https://www.nature.com/articles/d41586-024-00502-0
- (2) https://www.nature.com/articles/s41586-023-06831-w
- (2b) https://www.nature.com/articles/d41586-023-04006-
 https://www.nature.com/articles/d41586-023-