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Representation of diverse populations in addiction genetics: a call to action.

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There have been considerable advances in understanding genetic influences on psychiatric disease. However, individuals of diverse race, ancestry, and ethnicity have been largely underrepresented. Studies indicate that the majority of participants are from European ancestry, while less than 20% of participants in genome-wide association studies (GWAS) are of non-European ancestry. Although this is up from 4% in 2009 – largely due to cohorts of Asian ancestry – less than 5% are from other populations such as African, Hispanic, or Indigenous peoples. These results highlight a significant gap in the study of genetic risk underlying psychiatric illness and raises concern that benefits of genomic research will not reach diverse populations. Here, an overview of factors contributing to underrepresentation in psychiatric genetics and the corresponding implications for this lack of diversity will be discussed. To facilitate and promote research in multi-ancestry and admixed cohorts, key methodological considerations, challenges, and opportunities will be highlighted. Only with representation of diverse communities in research will we obtain an inclusive and comprehensive understanding of human genetic diversity and will be able to ensure that psychiatric genetics does not further exacerbate health disparities.