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Establishing African genomics and bioinformatics programs through annual regional workshops

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Abstract

The African BioGenome Project (AfricaBP) Open Institute for Genomics and Bioinformatics aims to overcome barriers to capacity building through its distributed African regional workshops and prioritizes the exchange of grassroots knowledge and innovation in biodiversity genomics and bioinformatics. In 2023, we implemented 28 workshops on biodiversity genomics and bioinformatics, covering 11 African countries across the 5 African geographical regions. These regional workshops trained 408 African scientists in hands-on molecular biology, genomics and bioinformatics techniques as well as the ethical, legal and social issues associated with acquiring genetic resources. Here, we discuss the implementation of transformative strategies, such as expanding the regional workshop model of AfricaBP to involve multiple countries, institutions and partners, including the proposed creation of an African digital database with sequence information relating

to both biodiversity and agriculture. This will ultimately help create a critical mass of skilled genomics and bioinformatics scientists across Africa.

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Ethics declarations

Competing interests

A.M.M. and H.G. are employees of Inqaba Biotechnical Industries. Z.C., M.A., S.E., L.H., T.S. and X.D. are employees of Illumina, Inc. M. Kilian, M. Kvas and C.W. are employees of Separations (Pty) Ltd. M. Maaloum and F.Z.T. are employees of Megaflex. M.P.-M. is an employee of MGI-Tech. R.B.T. is an employee of Inqaba Biotec Central Africa. T.E.E. is an independent contractor for the Wellcome Trust. All other authors declare no competing interests.

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