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^{OA}Open Access paper



Cover Qatar is a nation established in 1971 on the eastern edge of the Arabian Peninsula, yet the roots of the Qatari population can be traced back thousands of years by DNA analysis. In this issue, an in-depth study of rare genetic variation sampled by deep whole-genome sequencing of Qataris, and comparison to non-Qataris from around the world, identified a distinct clustering pointing to an indigenous Arab population that has likely inhabited the region for tens of thousands of years and who are the most distant relatives of non-African peoples worldwide. The cover illustration depicts 12 pairs of X and Y Chromosomes in Arabesque style, each representing an inferred ancestral population of worldwide contemporary humans. A pair of chromosomes in traditional Qatari colors highlights the indigenous Arab genome within the Qatari population and the distinct aspects of the Qatari male (Chr Y) and female (Chr X) lineages, which were critical for untangling the unique position of indigenous Arabs in worldwide human ancestry. (Cover illustration by Ghada Ali Al-Khater [galkhater@gmail.com], a native Qatari artist and designer whose work is inspired by Islamic geometry. [For details, see Rodriguez-Flores et al., pp. 151–162.]