

ALLERGY, GENETICS

# GENES ON THE FAST LANE

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I need to refer here to a [post 3 years ago](#) and the [medical literature](#) that genes frequencies may have changed rapidly between [generations](#).

Any empirical proof of this hypothesis, however, is scarce so far. Or I have to say, until this week, when I found a study published earlier in PLoS ONE that tackles this problem: [\*Selection for Genetic Variation Inducing Pro-Inflammatory Responses under Adverse Environmental Conditions in a Ghanaian Population\*](#)

Here we show that an IL10 haplotype that associated with a pro-inflammatory innate immune response, characterised by low IL-10 and high TNFa levels, was enriched among Ghanaian elders. Furthermore, in an environment where the source of drinking water (wells/rivers vs. boreholes) influences mortality risks, we observed that carriers of the pro-inflammatory haplotype have a survival advantage when drinking from wells/rivers but a disadvantage when drinking from boreholes.

Yea, yea.