New genome mapping technique can explain tuberculosis susceptibility

The fight against tuberculosis (TB) has been extended through the use of a genetic mapping technique called admixture mapping. This could help uncover previously unknown genetic factors contributing to susceptibility to the disease.

To use this genetic technique, access to an admixed population that originated from two or more other populations (the so-called parental populations) is needed. These parental populations should have been separated for long periods of time and must differ in their genetic susceptibility to the disease.

Researchers at Stellenbosch University have identified South Africa as an ideal location to perform an <u>admixture mapping study</u>. This is because the country has a recent history of admixture in its populations. In addition, research has suggested differences in genetic susceptibility to <u>TB</u> between parental populations.

The study identified regions of the genome that may well harbour informative and novel TB susceptibility candidate genes. Work is currently underway to investigate these findings.

About <u>one-third</u> of the world's population is infected with the TB bacterium, but only 5 percent to 10 percent progress to having the disease and its symptoms. Infection with Mycobacterium tuberculosis, which causes TB, can be contained by an individual's immune system without acquiring symptoms of the disease. But when this does not happen, the person develops active TB.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: How mapping ancestral genes could help the fight against TB