

In the news

THE SOLUTION TO A STICKY PROBLEM

If you stick your finger in your ear and the result is rather gooey then the chances are high that you come from Europe or Africa. If it's dry then you're likely to be of Chinese or East Asian descent.

A report published in *Nature Genetics* on 30 January reveals that wet or dry earwax type is down to a polymorphism in a gene, *ABCC11*, that controls the flow of earwax-modifying molecules, and therefore the consistency of the wax.

"People who inherit two copies of the mutant gene, one from each parent, have dry earwax. Any other combination gives you goo" (*ABC Science Online*, 30 January 2006).

The research team made this discovery by studying 126 Japanese people with different types of earwax. "To chart a global earwax gene map, the team next looked at volunteers from 33 populations worldwide. The dry earwax allele probably arose 'in northeast Asia and thereafter spread throughout the world'" (*USA Today*, 29 January 2006).

But what's the purpose of earwax? "Earwax helps to trap insects, clean the ears and keep them moist. The advantages of dry earwax, if any, are unknown. People with wet wax, however, tend to sweat more and have more body odour" (*The Sydney Morning Herald*, 31 January 2006). The fact that earwax type is linked to body odour has raised the suggestion that it might be linked to attractiveness.

So a long-standing anthropological riddle has been solved. But there are also practical benefits to this finding. "This is the very first time that a single letter difference in human DNA has been found to determine a visible genetic trait. [The population genetic data] also offer a method of studying how different populations moved around", Dr Sally Dawson told the *BBC News* web site (30 January 2006).

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