

How do traits trickle down from grandparents to grandchildren? Partially by chance.

What makes you who you are genetically? The easy answer is *your family*. The longer answer begins with the fact that all humans have two parents (at least for now), and usually four distinct grandparents (there are unfortunate exceptions). Genetically you are a recombination of four separate individuals. But that does not mean you have an *equal* contribution from four separate individuals. Exactly half of your genome derives from each parent. But while the proportion of one's inheritance from parents is fixed by exact necessity, the fraction from grandparents is governed by chance.

One might think these sorts of facts are useful only for the sake of satisfying curiosity, but sometimes theoretical knowledge can be put to practical use.

Read the full, original story here: [Which Grandparent Are You Most Related to?](#)

**Additional Resources:**

- ["How much of your genome do you inherit from a particular grandparent?,"](#) The Coop Lab, UC Davis
- ["Grandparents favor genetically close grandchildren,"](#) Phys.org
- ["'Build-a-baby' company patents 'genetic calculator,' raising ethical questions about which traits parents should be able to know and choose,"](#) National Post