

Genetics of Harry Potter: What wizardry can tell us about our DNA

[In the world of “Harry Potter,”] magic appears to follow some of the same rules as other traits that are inherited, but what could be the genetic factors that explain why someone is born a witch or a wizard — or without any magical ability at all?

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A roomful of people ... at Future Con got a crash course in wizarding DNA — and the basic workings of genetics — on June 17, at a talk hosted by Eric Spana, an assistant professor in the Department of Biology at Duke University, in North Carolina.

 Screen Shot at PM

Eric Spana describes wizard DNA at the Future Con panel, “Harry Potter and the Genetics of Wizarding.” Credit: M. Weisberger/Live Science

Is the wizarding gene recessive? Hagrid, the half-giant-half-wizard groundskeeper at Hogwarts, proves that it isn't, according to Spana. Giants have no magical ability, and Hagrid was born to a giant mother and a wizard father. For him to be born a wizard with only one copy of the wizard gene in his DNA, magical ability would have to be a dominant trait, said Spana.

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If the wizarding gene is working correctly, it makes a certain type of protein. The phenotype...is magical ability. But if there's a [mutation in that gene](#) — Spana suggested calling it the “SQUIB” mutation — a different type of protein turns the magic gene off. If one parent's DNA carries a copy of the SQUIB mutation, it can turn off the wizarding protein, which cancels a child's ability to do magic.

“We do this in fruit flies all the time,” Spana said, referring to manipulation of heritable traits in general....

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Genetics of Wizardry: Were Harry Potter's Magical Powers Written in His DNA?](#)