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Born in 1983 in Waterford, Ireland  
Studied Psychology at the London School of Hygiene and at the National University of Ireland, Galway as well as Tropical Medicine and Evolutionary Psychology at the University of Liverpool

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## PROJECT

### The Cultural Evolution of Harmful Medicine

A key difference between humans and other species is that humans rely on knowledge, skills and tools that have been developed by other people. Because this cultural information has often evolved over long periods, we benefit from the wisdom (and the lessons of the errors) of past generations. In general, this reliance on cultural information has been a success: humans thrive in almost every habitat and do some very interesting things.

However, the cultural knowledge we acquire from others is not always reliable or beneficial. Take medical treatments, for example. Bloodletting was an important treatment that persisted for a millennia or more, despite its significant harms (shock, blood-borne disease, sepsis etc.). This history of medicine is full of such examples. This raises some interesting questions: why is culturally acquired information sometimes good and sometimes not? How do the processes that lead to effective hunting tools, warm clothing and efficient agriculture also lead to vaccine scares, bloodletting and trephination?

One explanation might lie in the nature of feedback one receives after trying different cultural traits. Perhaps the costs and benefits of some kinds of cultural traits are difficult to evaluate. Another might be the nature or size of the social networks that these traits are embedded within. Perhaps knowledge of good treatments deteriorates when only a few people make use of them in each generation. At the Wissenschaftskolleg I will be using a large cross-cultural ethnography database to compare explanations for the persistence of harmful medical traits. I'll be examining the relationship between different medical practices and the broader culture in which they are nested. This will help illuminate the conditions under which harmful practices are likely to spread and persist.

#### Recommended Reading

Curtis, V., M. de Barra, and R. Aunger (2011). "Disgust as an Adaptive System for Disease Avoidance Behaviour." *Philos Trans R Soc Lond B Biol Sci* 27, 366, 1563: 289-401.