speaks to the continued public prestige and power of science.

Furthermore, their support base is far from fixed in stone. Some people are so committed to unorthodox views that they cannot be moved, but they are the exception. People motivated to explore the "cultic milieu" – that fluid countercultural space in which alternative therapies and conspiracy theories flourish – are open to changing their minds.

In his seminal work on the cultic milieu, sociologist Colin Campbell of York University, UK, stresses that it is not a space where firm opinions are held, but rather a "society of seekers" – people who "do not necessarily cease seeking when a revealed truth is offered to them".

This creates the space for proscience activists to compete for attention. When they do so, the internet becomes a tougher place for people to sequestrate themselves in a comfortable cocoon of the like-minded.

This is good news for the enlightenment project. People may be biased in favour of interpretations that align with their prejudices but this does not mean that they just believe what they like. Faced with information of sufficient quantity or clarity, people do change their minds.

So the challenge for the proscience movement is to keep an active and credible online presence. The web is an anarchic space where defence of science ranges from ridicule and banter to serious discussion about findings along with links to scientific articles and reports. It looks, in other words, like the space that used to be the preserve of the cultic milieu – but with greater informational depth. The weapons of science and reason are still very much in contention.

Nicoli Nattrass is director of the AIDS and Society Research Unit at the University of Cape Town, South Africa. Her new book is *The AIDS Conspiracy: Science fights back* (Columbia University Press)

# One minute with... David Healy

We can all help counter the drug industry's marketing machine, says the campaigning psychiatrist

## Your new book is called *Pharmageddon*. What does the title mean?

"Pharmageddon" refers to a change in healthcare that's rather like climate change. When we hop in our cars to go to work, this seems to be a good thing. But we don't connect it to the fact that we may be pushing the climate towards the brink. In the same way, the climate of healthcare is being pushed towards the brink by doctors giving patients expensive and risky drugs – and failing to notice when things go wrong. Medicine as we had it will cease to exist. It will become Healthcare Inc.

### Why has this happened?

Worldwide product patents give companies such extraordinary returns that they have got a tremendous incentive to hype the benefits of drugs and hide any possible risks. Then we made these drugs prescription-only, so the true consumers of a drug are not you and me. The consumer, from the industry's point of view, is the doctor who prescribes the drug. Companies offer free gifts for doctors, trips to the Caribbean to meetings, and so on. But most doctors, while they probably are influenced by these things, are even more influenced by the evidence.

#### So hasn't evidence-based medicine helped?

I'm an advocate of controlled trials but we have an overblown estimate of how useful they can be. Clinical trials are done mostly by the industry. Only half of the trials are published and of those that are, ghostwriters for the industry polish a negative trial so that it's glowingly positive.

## Couldn't these problems with clinical trials be fixed?

If we had the capability to do 100 times more trials than we're doing, if the trials were independent and we had access to all the data, then we would be much further forward. But you have to wonder how realistic that is. Controlled trials are hugely useful but they shouldn't be the only club that you take to the golf course. We need to restore people's ability to make judgement calls based on the evidence in front of their own eyes.



#### **PROFILE**

David Healy is director of the North Wales School of Psychological Medicine, Bangor, UK. A long-standing critic of the pharmaceutical industry, his latest book is *Pharmageddon* (University of California Press)

## How will your new website, RxISK.org, help?

The idea is to encourage people to produce the best possible descriptions of things that happened to them on treatment and to take the descriptions to their doctor, with a view to engaging him or her in the process. If we get a bunch of people who have the same issue, we'll be able to tease things apart. We'll be giving people feedback in real time, saying: "We've got 200 people who have reported the same problem." It's going to make lots of patients and doctors much happier to speak up.

## Some parents sincerely but wrongly believe vaccines caused their children's autism. Won't you find similar problems with false leads?

Yes, of course the data is going to be dirty. It's trying to get a process of teamwork going, as opposed to people coming up with observations and facing an industry that is in control of a body of evidence that seems to say there is no link. The more people we can pull in, the better the chance that we're going to get it right.

Interview by Peter Aldhous