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What makes an expert?

Brian Deer

BMJ 2007;334:666-667
doi:10.1136/bmj.39146.498785.BE

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She questions whether it is appropriate for the European Commission to try to encourage anyone, let alone drug companies, to produce more health information. "There are already a lot of bodies that are producing independent reliable information. It is better to help patients to identify this information rather than add new information." Her organisation suggested at the pharmaceutical forum's September meeting that the commission should instead endorse an EU logo mark that would be awarded to high quality information sources and act as a trust certificate or quality stamp to help patients identify reliable, evidence based advice.

AIM's position is that drug companies should respect that their involvement with information provision should extend to the package information and nothing else. "Our message is be careful and don't make the confusion between public health interests and commercial interests," Mrs Kessler explains.

In anticipation of the commission's final report in April, five international health associations have joined forces to step up their opposition campaign. In a declaration outlining what they believe to be fundamental principles for the provision of reliable health information, they assert that "relevant, comparative and appropriate information on health issues cannot be provided by drug companies," because in a competitive marketplace, drug companies must present their own products in a more favourable light than other preventive or therapeutic options.

But, says Mrs Kessler, it is difficult to predict whether this opposition will sway MEPs when the proposals are debated in parliament. "It is a strong industry and they will battle very hard to maintain their advantages," she says. The fact that European parliament elections are coming up soon could have some bearing. "Health topics are very sensitive and people who want to be elected would like to be seen well, so there will be a lot of argument," Mrs Kessler predicts.

The quick turnaround of MEPs means that few of the original objectors from 2002 remain in office—and that could mean a completely different outcome when patient information laws are debated again. Asked last month what underlay his optimism in pushing through patient information changes, Mr Chatzimarkakis replied simply: "Now, 75% of the members of parliament are new."

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Competing interests: None declared.

What makes an expert?

Autism activists are behind a journal's decision to retract a paper claiming a preservative once routinely used in vaccines is responsible for the condition.

Brian Deer examines the facts

Last October, *Autoimmunity Reviews* published online the draft of a seven page paper by reporting laboratory and clinical tests suggesting that thiomersal, a mercury based preservative once routinely added to most vaccines, was the main culprit for a sharp rise in diagnoses of behavioural disorders.¹ The paper was written by Dr Mark Geier, a self employed American geneticist, and his son David. The pair also reported treating autistic children with a hormone product, leuprolin acetate, which is sometimes prescribed for precocious puberty. They claimed that the drug produced "very significant overall clinical improvements" with "minimal" adverse effects.¹

But even before the journal posted its finalised contents page, Kathleen Seidel, an autism activist in Peterborough, New Hampshire, who runs the website neurodiversity.com, criticised the paper in a 2500 word email sent to the journal's editors-in-chief, Yehuda Schoenfeld of Tel Aviv University, and Eric Gershwin of the University of California, Davis, and copied to all 42 members of the journal's editorial board.²

One of Ms Seidel's complaints concerned

the Geiers' apparent institutional review: "The seven-member IRB institutional review board consists of Mark and David Geier; Dr Geier's wife; two of Dr Geier's business associates; and two mothers of autistic children, one of whom has publicly acknowledged that her son is a patient/subject of Dr Geier, and the other of whom is plaintiff in three pending vaccine injury claims."

According to Ms Seidel, neither editor responded to her email, despite several approaches to them. US Federal Court records show that Drs Schoenfeld and Gershwin have both been retained as experts for claimants in vaccine litigation.

The Geiers' paper in *Autoimmunity Review* has now been retracted, but I have been unable to discover the journal's reasons for retraction and the editors have not responded to my emails and phone calls.

Professor Graham Hughes, formerly of the Rayne Institute at London's St Thomas's Hospital, and a member of the journal's board, was also unable to help. "All I know is that I got a rather heated 20-page email from a lady," he said when asked for his comments on the retraction. "I really don't know what it's about."





Dr. Mark Geier and his son David say they traced autism to vaccines

Questions then emerged from Ms Seidel's analyses of a paper by the Geiers in *Medical Science Monitor*.⁶ Chunks of text from the article were alleged to be identical to published material from a researcher at the Centers for Disease Control and Prevention, which were interspersed with parts of an old Geier paper.

"Although the byline notes indicate that Dr and Mr Geier contributed to study design, data collection, statistical analysis, data interpretation, manuscript preparation, and literature search," Ms Seidel says, "there is no indication that their 'data collection' might have entailed collecting data from another researcher's study, or that their 'manuscript preparation' might have entailed merging that study with an article they had previously written."⁷

Although there may be reasonable answers to the queries raised by Ms Seidel, my emails putting questions to Mark Geier went unacknowledged last week. Ms Seidel's allegations have also highlighted potential problems with the review processes of biomedical journals. However, the response from academics is not hostile. "I'm very impressed by the scholarship in the neurodiversity.com website," says Simon Baron-Cohen, director of Cambridge university's Autism Research Centre. "I welcome the debate being widened, now that science is transparent on the internet."

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Competing interests: None declared.

- 1 Geier DA, Geier MR. The biochemical basis and treatment of autism: interactions between mercury, transsulfurations, and androgens retracted. *Autoimmunity Rev* 2006 doi:10.1016/j.autrev.2006.09.014.
- 2 Siedel K. Significant misrepresentations: Mark Geier, David Geier and the evolution of the Lupron protocol (part thirteen): a silent withdrawal. Jan 23, 2007. <http://neurodiversity.com/weblog/article/124/>.
- 3 Neurodiversity page. ventura33.com/neurodiversity/.
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- 5 Siedel K. Significant misrepresentations: Mark Geier, David Geier and the evolution of the Lupron protocol (part one): inaccurate byline. Jun 9, 2006. <http://neurodiversity.com/weblog/article/97/>.
- 6 Geier DA, Geier MR. A two phased population epidemiological study of the safety of thimerosal-containing vaccines: a follow-up analysis. *Med Sci Mon* 2005;11:CR160-70.
- 7 Siedel K. Significant misrepresentations: Mark Geier, David Geier and the evolution of the Lupron protocol (part eight): bibliographic mergers and acquisitions. Aug 10, 2006. <http://neurodiversity.com/weblog/article/108/bibliographic-mergers-acquisitions>.

Meanwhile on the net, the retraction has been greeted with glee by autism activists. Ms Siedel is a prominent contributor to an "autism hub" of websites, which has sprung up in the past two years to challenge the concept of autism as a disease that needs to be cured. The neurodiversity movement contends that hard wired behavioural difference should not be the basis for discrimination, or necessarily drug treatment.

"Neurodiversity is both a concept and a civil rights movement," says one of many definitions on network sites.³ "In its broadest usage, it is a philosophy of social acceptance and equal opportunity for all individuals whose neurology differs from the general, or neurotypical, population."

Janssen Pharmaceuticals, which produces risperidone, a drug used to treat autism, is well up the activists' suspicion list for allegedly fuelling the rise in diagnoses of autism. But currently at the top of that list are the Geiers because of their high profile support for the fringe theory that mercury in vaccines causes autism.

The Geiers operate various organisations from their private address in the Maryland suburbs, including the Institute for Chronic

Illness and the Genetic Centers of America. Neither of these organisations has listed telephone numbers or web addresses.

The Geiers have also been hired to appear in hundreds of vaccine related lawsuits. In these, too, they've come under fire, with judges handing down stinging criticisms. Three years ago, a Washington vaccine court declared Mark Geier to be "a professional witness in areas for which he has no training, expertise and experience," citing numerous earlier cases in which he was criticised from the bench.

However, such criticisms have apparently had little effect on the boards of some biomedical journals. A string of journals have now carried articles by the Geiers, with Mark Geier reviewing a book on the cause of autism in this month's *Lancet Neurology*.⁴

But the Geiers and the journals that have published their work have reckoned without Ms Seidel. After her emails to *Hormone Research* last summer, its editors withdrew a statement on a paper which affiliated David Geier with George Washington University, where Ms Seidel's inquiries found he was apparently a masters student for just two terms.⁵