

# Just when you think science can't get any junkier, this comes along

By ACSH Staff — March 17, 2014



We at ACSH are sure that you have heard us comment repeatedly

that nothing surprises us anymore, because we've already heard it all.

Yet, we must once again eat crow, because we STILL can't get this right. Just when we think (or are maybe even sure) we've seen it all, it turns out we haven't. Not even close this time.

Today's How in god's name can you publish this and keep a straight face item comes from a group from the University of Chicago. Lead author [Andrey Rzhetsky, PhD](#), [1] and his co-authors writing in the March 13th issue of PLOS Computational Biology have taken twisted logic to a new level, claiming that there is a strong link between autism and environmental toxins.

OK, fine. Whether you buy this or not, at least it's a non-crazy premise. That is, until you look at how they measure environmental toxins. At this point, NON-crazy turns into VERY-crazy.

Why? Because they don't even measure environmental chemicals. Rather, they use a surrogate marker of chemical toxicity male congenital malformations.

Yes, that's right, says ACSH's Dr. Josh Bloom. The authors have decided that if I am the victim of exposure to toxic chemicals that there will be something wrong with my happy boy. And this therefore constitutes proof that I have been exposed to toxic chemicals, AND that my chances of having some form of autism will be greatly increased. I would call this circular reasoning, except that would imply that there is in fact any reasoning. So, in honor of the upcoming NCAA tournament let's just call it 'Farce Madness.

ACSH friend (and the founder of the enormously popular site [Science 2.0](#) [2], Hank Campbell, who is no stranger to junk science himself) concurs enthusiastically. Campbell, who has also written an ACSH-like book called [Science Left Behind: Feel-Good Fallacies and the Rise of the Anti-Scientific Left](#) [3] says, This group is using some of the most bizarre assumptions I have ever seen. They are claiming that chemicals are causing autism, but there are NO measurements of chemicals.

Instead, they have picked a surrogate marker one that means nothing to support their conclusion.

He continues, "They imply that genital malformation is a measure of chemical exposure. Quite an assumption. The only problem is that they could have picked other surrogate markers that would

have made just as much sense: The number of Hello Kitty lunchboxes on the 3rd shelf of your closet or the price of dental floss at CVS. I've been doing this for awhile, but haven't seen anything this awful in some time.

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**Links**

[1] <http://genes.uchicago.edu/contents/faculty/rzhetsky-andrey.html>

[2] <http://www.science20.com/>

[3] [http://www.amazon.com/gp/product/1610391640/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=funnierthanyo-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1610391640](http://www.amazon.com/gp/product/1610391640/ref=as_li_tf_tl?ie=UTF8&tag=funnierthanyo-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1610391640)