Elsevier’s “withdrawal” of a small veterinary study breaks all the rules of scientific publishing. The biggest name in scientific literature has produced fake medical journals for Merck’s advertisers before, so yanking a study that doesn’t pass the vaccine industry’s sniff test would be nothing. Celeste McGovern looks at a case study of how Pharma is killing science.

It’s not often that veterinary research is so controversial that it falls into the jaws of censorship zealots. That is exactly what happened recently, however, when editors at a science journal suddenly turned on a small Spanish sheep study which they had already peer-reviewed and published and stamped it: “WITHDRAWN” — the equivalent of a scarlet letter “A” in the science publishing world.
This was not about shoddy science or ethical breaches; an editor tried to soothe the outraged veterinary professor at the head of the research. But the focus was “delicate” and “controversial” and someone — some anonymous letter-writer — had wanted the study removed, and the journal acquiesced.

“Dear Dr. Luján,

“I wanted to step in here to say that your manuscript is not being retracted – which implies wrongdoing and could damage your professional reputation,” Anne-Marie Pordon, publisher of Pharmacology and Pharmaceutical Sciences titles for Elsevier journals interjected in a heated e-mail exchange between the lead researcher and various editors. “We are withdrawing the paper, which does not imply misconduct in any way. There will be simply a statement that says “This paper has been withdrawn at the request of the _____” (Authors or Editors in the blank.)” Pick your poison. You remove it, or we remove it.

Mercky past

Elsevier journals are described as “one of the world’s major providers of science, technical and medical information.” They also have a skeleton or two in the closet. A decade ago, they were exposed (https://www.the-scientist.com/the-nutshell/merck-published-fake-journal-44190) in a private injury case for being paid by Merck to manufacture and distribute two completely fake journals to market Merck’s drugs. They looked like authentic, peer-reviewed science journals, but they contained only favourable studies about the use of Merck’s deadly Vioxx and another drug with potentially fatal side effects. Nowhere did they disclose that they were paid advertising for Merck. Four more fake Elsevier journals were sponsored by unnamed pharmaceutical companies.

“I’ve seen no shortage of creativity emanating from the marketing departments of drug companies,” consumer advocate Peter Lurie of the non-profit Public Citizen told The Scientist after he reviewed Elsevier’s fake science journals. “But even for someone as jaded as me, this is a new wrinkle.”

An Elsevier press release (https://www.elsevier.com/about/press-releases/clinical-solutions/statement-from-michael-hansen,-ceo-of-elseviers-health-sciences-division,-regarding-australia-based-sponsored-journal-practices-between-2000-and-2005) said the company regretted the “unacceptable practice” of its Australian office. The scandal evoked a flurry of news stories and then it disappeared. Elsevier never revealed the sum they received from Merck or the names of the other pharmaceutical firms that had bought fake science from them. There was no penalty. And there was no authority or oversight agency willing or able to keep Elsevier from doing it, or something similar, again.

Secret critic
Fast forward to 2019. There was no doubt by any party in the email exchange between Elsevier’s editors and Lluís Luján, the professor of veterinary pathology at the University of Zaragoza, Spain, and lead author of the “controversial” sheep study, that this was highly unusual publishing practice.

Luján was obviously livid with a request that he withdraw his own study (http://www.ghostshipmedia.com/wp-content/uploads/2019/03/Asin-et-al-Pharm-Res-Behavior-in-vaccinated-sheep-full-paper-with-Suppl-material-1-1.pdf) which had already been peer-reviewed and published online by Elsevier’s journal *Pharmacological Research*. He flatly refused. It’s hard to imagine a scientist who believes in the integrity of his research doing otherwise. “Withdrawn,” unlike what Pordon tried to claim, is virtually synonymous with “retracted” in the science world and everybody knows it. It is a death sentence for a paper.

*Pharmacological Research*’s editor-in-chief, Emilio Clementi, a professor of pharmacology at the University of Milan presented Luján with “concerns from the readership” – a list of accusations of flaws with his methodology to respond to. Later in correspondence, “concerns from the readership” morphed into “a signed note of concern from a reader” but the letter writer’s identity was kept secret – a big red flag that something foul was afoot.

Ordinarily, if someone has objections to the methodology in a published science paper, they send a letter to the editors. It is difficult to think of any circumstance that the identity of the letter-writer would be hidden. The only reason someone might want to hide their identity is if they had a conflict of interest – like, they worked promoting a relevant pharmaceutical, for example. In any case, letters to the editors are posted on “Letters to the Editors” pages and rebutted by authors there.

That was not all that was strange, however. Luján answered all the accusations, noting that they were based on flawed assumptions and appeared to be deliberately “misleading” and “spurious.” They seemed to have been written by someone with very little knowledge of veterinary research or methodology of behavioural science research.

**Ignored advice**

Clearly defeated on that front, Clementi decided that Luján would have to re-present all of his raw data to the journal’s statistical editor, Elia Biganzoli as well. In his emails, Biganzoli remarked, revealingly, that the work focused on a “very delicate issue in science” with many “controversial aspects.” He cited a review paper by a self-described “vaccine activist” and pharmaceutically-funded
researcher, David Hawkes as being absent from the citations on the list. Hardly a crime. Scientists cite the papers they see as valuable and relevant. Excluding an outlying opinion review paper which contains no original science is not irregular.

In any case, Biganzoli still didn’t think there was reason to withdraw. “I don’t think that withdrawal of the paper should be advised,” he wrote to the Elsevier editors. “Withdrawing the paper for these reasons would imply a similar action on many other works. At present, this option would not be sustainable.”

Besides, Biganzoli said, “the exploratory nature of the paper is implicit” and the researchers themselves said so in the paper.

Clementi and Pordon must not have liked this. They ignored their own expert, stamped the paper “WITHDRAWN” anyway and scrubbed it from the print publishing line-up. They must have known they were breaking understood rules of science publishing, the Committee on Publishing Ethics (COPE (https://authorservices.wiley.com/asset/Best-Practice-Guidelines-on-Publishing-Ethics-2ed.pdf)) and Elsevier’s own code of ethics. (https://www.elsevier.com/about/policies/article-withdrawal) Did they consider if they were setting a dangerous publishing precedent? Or if they were denigrating science—the pursuit of truth, wherever the trail leads, and whomever it offends?

Stalin-style science censorship should make people, particularly scientists, curious. Just what did the sheep study find? Why would a small veterinary study have sparked such attention—and denunciation? How could a mainstream science journal nullify publishing protocols to retract sound science they have already peer-reviewed and published? Who wields such power over scientific publishing?

**Baffling illness**

To begin, the study’s lead author, Lluís Luján, could hardly be described as controversial. With 30 years experience in the field of animal pathology, Luján is a sort of Spanish version of a James Herriot country vet—affable, respected by farmers, students and his peers alike. There is not usually much controversy in determining the cause of death of farm animals in northern Spain. Yet Luján stumbled into one of the most controversial arenas of our time more than a decade ago when he was called out to see an oddly-diseased flock in the Aragon region of Spain, where he lives and works.

After the first cold snap of the winter of 2007, Luján arrived at a sheep farm not far from his veterinary faculty. The farmer was worried; he had worked among sheep his whole life and he’d never seen or heard of anything like this. Initially, just a few animals in his flock were affected, starting
about six years earlier. A number of veterinarians had come to see his sheep already and they had seen pockets of this on other farms, but they had not known what to do. The sheep had mostly recovered by spring or summer in the past, but this was the worst the farmer had seen. Now almost all of his flock was affected.

As soon as he saw the animals, Luján could see that the sheep were ill. They were emaciated and their raw, pink skin showed where great patches of wool were missing from their flanks. This was a sure sign they were wool biting, obsessively yanking the wool from their flock mates and chomping it. Wool biting is well-documented as a behavioural anomaly in veterinary journals but it is not well understood. It has been studied in relation to overcrowded conditions, animal “boredom” and nutritional deficiencies, but none of these factors had adequately explained the phenomenon and they certainly weren’t the cause of these severe cases Luján was looking at. These animals were restless and skittish. Some were lethargic and weak. Some had tremors and could barely stand.

As a pathologist and an academic, Luján was familiar with sheep disease but this was nothing he could easily diagnose. He began testing to rule out the usual culprits: pathogens like viruses, bacteria and parasites. He wondered about an environmental toxin, too, so he tested the animals’ water, their food, the soil they grazed on. In the meantime, he did what he could to alleviate the symptoms. He changed their diets and some management practises and had them vaccinated again. The test results were unrevealing.

A veterinarian from the government administration was called to the farm and he rang Luján. “Lluís, I’ve just been to the sheep Auschwitz,” he said wryly. “What do you make of it?”

Luján recommended that the animals be put down as a precautionary measure. The government would compensate the farmer and give him new sheep.

**The epidemic**
About two years later in 2009, Lujan was in his office when the fax machine hummed and a
government animal health authority bulletin announced a round of bluetongue vaccination for the
region. There was nothing remarkable in this. Bluetongue is a noncontagious, viral disease transmitted
by midges to ruminants. It causes fever and swelling of the mouth and gums as well as a tell-tale
protruding cyanotic tongue. A virulent strain can kill a third of a flock and it had re-emerged
(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2681128/) in northern Europe in 2006 and spread
throughout Belgium, Germany, the UK and Spain by 2007 and 2008. The European Union was
responding with the widest vaccination campaign in ovine history, targeting about 90 million animals
throughout the continent with a total of four vaccines and boosters against two strains of the virus in
less than a month.

Over the next few weeks, Luján’s phone began to ring. Farmers from all over the region were
reporting outbreaks and bizarre disease symptoms that he had seen before. Some of them were linking
it directly to the recent bluetongue vaccines.

The mystery illness was sweeping across Spain. Initially, just a few sheep were ill. They became
agitated and nervous. They were wool biting. Some clenched their teeth. Some became lethargic and
reluctant to move. It was easy to see involuntary tremors of their great brown eyeballs. A few were
transiently blind. They were disoriented and unresponsive. After a few days, most of the animals
recovered but the most severely affected of the flock collapsed in seizures and died.

When the weather turned cold, a second wave of the illness affected thousands of sheep, sometimes
wiping out entire flocks. These animals lost weight and looked emaciated. They had muscle tremors
and weakness. Some had a light but constant tilt to their heads. Farmers reported pregnant ewes
aborting spontaneously. Thousands of animals were stuporous. Many became unresponsive, dropped
to their front quarters, become comatose and died.

‘Oh my god, it can’t be the vaccine’

Veterinarians began vigorously investigating the baffling disease that was decimating the Spanish
sheep industry. Luján was not surprised that, despite their tremendous efforts, their tests were coming
up empty-handed. He had done them all before himself, on the sheep “Auschwitz” farm.

He was reeling, however. Asked how the idea that a vaccine could be causing this disease impacted
him at the time, Lujan gripped a stone ledge beside him as if to brace himself. In other words, it was
earth shaking. “Oh, my God. It can’t be the vaccine,” he recalls thinking. “I couldn’t believe it. But it
was just too much coincidence.”
He began poring over journals on Pubmed and one evening, he found a description of what he was seeing in the sheep in a human immunology journal describing a condition called ASIA – Autoimmune/Inflammatory Syndrome Induced by Adjuvants. Aluminum adjuvants used in human vaccines — and like that used in the bluetongue sheep vaccine — were known to elicit a hyperactive immune response in some people, and to set off immune system cascades that could later manifest as overt autoimmune disease. The aluminum ingredient in vaccines was connected to diseases such as encephalitis, macrophagic myofasciitis and Gulf War Illness. The Spanish sheep disease sounded very similar to this post-vaccination disease (http://www.smartvax.com/images/PDF/adjuvants_autoimm_review_2011.pdf) described in humans.

It was after 1 am and Luján shot an email off to the author, immunologist Yehuda Shoenfeld, director of the Zabludowicz Center for Autoimmune Diseases associated with Tel Aviv University, a giant in the field of autoimmune disease with more than 1,500 published papers in immunology, and he hoped he might hear from him eventually. The next morning, to his surprise, Shoenfeld had already replied.

**Inducing disease experimentally**

Luján’s team published a paper in 2013 describing the mystery illness that they now called “Ovine ASIA” and the post mortem findings of 64 affected sheep from the Zaragoza region of Spain. The wasted corpses of the animals had markedly thickened nerves that were easily visible, protruding on their abdomens and backs and down their legs. Dissection revealed that they had meningoencephalitis-like disease, their brains were inflamed and there was evidence of “severe neuron necrosis.” Special techniques revealed aluminum in their nerve tissue.

More crucially, the researchers were able to induce the disease in a small number of sheep by giving them repeated aluminum-containing vaccinations. These vaccinated sheep lost on average 8.5% of their body fat compared to controls, they showed nervous behaviour changes – depressed, lethargic behaviour alternating with skittishness – they had light fluid around their hearts, and aluminum was detected in their nervous tissue at the late study stage. The veterinarians concluded: “A huge research effort is needed in this field to help understand this process, something that will be of great benefit for both human and animals.”

A study like should have sent shock waves through public health agencies worldwide and triggered a storm of research on the aluminum additive given in ever-increasing doses in animal — and childhood — vaccines. A year later, however, Luján was presenting the findings to researchers at the 2014 Autoimmune Congress in
Nice, France. “We are supposed to balance the benefits of vaccines against the adverse events,” he concluded in a somewhat frustrated tone of urgency. “What is sold is [the message] that vaccines have only beneficial effects, and the rest is forgotten or ignored, or nobody wants to hear about it.” He had no idea how prescient those words were.

Three troubling discoveries

Luján’s team of veterinarians undertook to expand the research themselves in the meantime and recently they published three studies based on their findings:

Granulomas

One study (https://journals.sagepub.com/doi/abs/10.1177/0300985818809142), published in *Veterinary Pathology*, describes how 84 lambs were divided into three treatment groups of 28 animals each: the first got 19 aluminum-containing vaccines injections over 15 months, the second, got shots of the aluminum adjuvant ingredient alone, and the third, a control group, received saline. Post mortem studies revealed that all of the vaccinated sheep and 92.3% of the lambs who got adjuvant-only injections, but none of the control animals, developed “granulomas” – cyst-like nodules of white blood cells loaded with the neurotoxic metal aluminum. These granulomas were at the injection site and in nearby lymph nodes – evidence that aluminum used in vaccines is not inert or excreted rapidly from the body as public health officials have maintained since they began using it in vaccines in the 1920s. It is swallowed up by macrophages and transported to lymph nodes. Other studies have shown that from the lymph nodes, aluminum slowly translocates (https://www.ncbi.nlm.nih.gov/pubmed/25699008) to distant sites around the body and accumulates in the brain. The vaccinated sheep had more of these granulomas than the aluminum-only group.

Genetic changes. A second study (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6206264/) from the Spanish research was published about the same time in the journal, *Frontiers in Immunology*. This examined changes that the vaccines and adjuvants alone induced and concluded that “it seems that aluminum-containing adjuvants are not simple delivery vehicles for antigens, but also induce endogenous danger signals that can stimulate the immune system.”
Bizarre behavioural changes. The third and final study (https://www.sciencedirect.com/science/article/pii/S1043661818313732), the one which Elsevier suddenly withdrew after publication from *Pharmacological Research*, described the behavioural changes observed in the vaccinated and aluminum-only animals compared to the controls. After just seven inoculations, the vaccinated and aluminum-adjuvant targeted animals only, began compulsive wool biting – the behaviour that has perplexed and annoyed farmers but was also very apparent in the ovine ASIA syndrome. None of the adjuvant-only or controls, housed in identical conditions, exhibited the bizarre behaviour.

The breed of sheep used, *Rasa Aragonesa*, is a particularly gregarious breed not inclined to solitude, so when animals began seeking isolation it was readily noticed by the researchers. So were bizarre behaviours like rubbing repeatedly against fences and biting flock mates.

**The anonymous letter-writer**

It was this study that some “concerned reader” with apparent connections to Elsevier – wanted out of the journal. In all his correspondences, *Pharmacological Research’s* editor-in-chief Clementi refused to identify who wrote it. This is bizarre departure from publishing protocol. The most obvious reason someone would want anonymity is to hide a conflict of interest. If they are a lackey of the aluminum-adjuvanted vaccine industry, for example, their letter would be on par with a letter from the tobacco industry criticizing research on smoking and cancer. Rubbish.

At one point, Luján inquired if the writer wasn’t David Hawkes himself, the small-fry virologist from Australia whose paper was cited by Biganzoli. Hawkes is a self-described “passionate advocate of vaccination” (http://www.ghostshipmedia.com/2017/10/15/profile-passionate-vaccine-advocate/”); he administrates an Australian group whose mission (https://www.facebook.com/stopavn/) is to “relegate anti-vaccination campaigners to irrelevance.” He also works for a company whose stated mission (https://www.vcs.org.au/) is to promote and expand uptake of the HPV vaccine in Australia. The HPV vaccine has the highest load (https://healthfreedomidaho.org/new-hpv-vaccine-with-double-the-aluminum) of aluminum adjuvants of any vaccine on the market. VCS, whose research is financed by Merck (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5887016/), would hardly want word getting out on aluminum vaccines creating granulomas and weird behaviour in sheep just when their government-supported product to test HPV vaccinated women is taking off.

**Conflicts of interest**
In 2018, Hawkes published – in one of Elsevier’s journals, no less – a paper calling ASIA syndrome, as recorded in hundreds of cases, a “twenty first century equivalent to the boy who cried ‘wolf’ in Aesop’s fable.” Hawkes’ paper notes that “three publications by the advocates of ASIA were recently retracted from peer-reviewed journals” and calls for “an immediate moratorium on animal experiments of ASIA until an independent inquiry has been conducted to determine the existence of a clinically relevant syndrome, identifiable as ASIA in humans.”

It’s interesting that the “withdrawal” of the three other ASIA studies were just as baffling as the current sheep study saga. It’s also interesting that Hawkes’ co-author, Rohan Ameratunga was himself commissioned by the New Zealand government to “review the existence of ASIA” for payment. Was this the kind of “independent” review they wanted? Ameratunga declared his conflict of interest on the paper as a practising allergy specialist who prescribes aluminium-containing injections – themselves suspect in literature for inducing ASIA syndrome.

Ironically, on this Elsevier paper, Hawkes didn’t disclose his own conflicts of interest as a vaccine advocacy group administrator or as an employee of a company that promotes an aluminum-loaded vaccine – an ethical breach in scientific publishing if ever there was one.

Ghost Ship Media emailed David Hawkes to ask him if he wrote the letter as was suggested in the correspondence between the editors and researcher. He didn’t reply. Pordon and Clementi declined to comment as well. Of course, given its past financial dealings with the company, maybe the letter was from a friend at Merck.

‘Boycott Elsevier’

Other scientists are observing the sheep study saga. Colleagues of Luján wrote Elsevier to protest. Christopher Exley, a professor of bioinorganic chemistry at Keele University, UK, and a leading authority on aluminum in disease is not at all surprised. “The same happened for a paper published in
Vaccine and a Letter published in Toxicology, both Elsevier journals,” he says. “A recent attempt was made to do the same on a paper published in the Journal of Inorganic Biochemistry.”

Exley refers to pro-vaccine activists like Hawkes and the publishers at Elsevier as “perpetrators of these crimes against science” and says “editors giving in to pressures of this ilk from Elsevier should be ashamed.”

“Scientists should boycott Elsevier,” he says.

The cat cancer example

“It’s a very tough moment for all of us,” Luján remarks. “Elsevier has thousands of journals and this shows that some of them have no scientific integrity. They are not independent.”

“This is a very simple study,” adds Luján, who will seek to republish his findings elsewhere. “This is experimental research that can be done again and can be done very cheap. Just repeat it.”

The fact that public health isn’t interested in repeating the study is baffling to him. The danger of aluminum in animal vaccines is already well-documented, he says, pointing to the phenomenon of cancer at the injection site in cats (https://www.avma.org/KB/Resources/Reference/Pages/rbbroch.aspx). Veterinary researchers saw the problem and removed aluminum from cat vaccines. A recent study (https://www.ncbi.nlm.nih.gov/pubmed/30213367) from Switzerland revealed that while aluminum-containing vaccines were in use there, related feline cancers increased steadily but since the aluminum-adjuvanted shots were abandoned in 2008, injection site cancers have all but disappeared. Vet pharmaceuticals advertise vaccines as “aluminum-free (https://www.elanco.us/products-services/cats/ultra-fel-o-vax).”

“You have the proof it can be done,” says Luján. “In a few years, all vaccines can be clean of aluminum. It questions why this material keeps being used.”

Already he adds, veterinarians he knows have simply stopped vaccinating sheep with aluminum-containing vaccines to avoid health problems. One colleague told him that every time he reported ASIA symptoms to oversight agencies, his complaints were ignored. “I don’t have the problem anymore because I don’t vaccinate anymore,” he told Luján. “I just assumed the risk.”

“I think this why they are afraid of this,” Luján says, “because in this business we have to look at the risks, and this a very big one.”

‘Work on something else’
There appears to be a problem admitting there is a problem, however. Luján’s research documents the dangers to animals of a toxin that is given in increasing quantities (https://www.researchgate.net/publication/311824598_Aluminum_in_Childhood_Vaccines_is_Unsafe) to children. Neurotoxic aluminum is used in numerous human vaccines – against HPV, hepatitis, pneumococcal disease, meningitis and many more in the pike. The trials of these vaccines use aluminum adjuvant or other vaccines containing aluminum as ‘placebos’ (https://www.ncbi.nlm.nih.gov/pubmed/21871940), rendering them useless for detecting a problem. Vaccinated versus unvaccinated studies are not done. Aluminum vaccines have never been tested for their combined effects in children. Long-term studies are scant – and they are published by scientists who work for the vaccine industry in the journals we know have had a financial relationship with the vaccine industry. A big problem in sheep should signal, at the very least, concern about a potential problem in humans.

“There are dogmas,” Luján says. The biggest dogma in the 21\textsuperscript{st} century is that vaccines are totally safe. That nothing can go wrong, ever. “That’s why we are being targeted. They want to send a message: don’t get into this business. Work on something else. They just want the thing to disappear.” If only it were so easy.