

Shockingly high levels of weedkiller found in popular breakfast cereals marketed for British children

"Corporate totalitarianism ... rules through dispensability and corruption. It treats communities, people, countries, ecosystems and species as disposable and dispensable."

*"Far into the future, the World Controllers have created the ideal society. Through clever use of genetic engineering, brainwashing and recreational sex and drugs, all its members are happy consumers."*¹

"Comments are free...but facts are sacred." CP Scott 1921 *Guardian* Editor

A *Guardian* editorial on 26/09/2018: *Mr Corbyn ought to protect a "free press", not attack it.*

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Weedkiller found in 43 out of 45 popular breakfast cereals marketed for US children

Significant levels of the weedkilling chemical glyphosate have been found in an array of popular breakfast cereals, oats and snack bars marketed to US children, a new study has found.² Tests revealed glyphosate, the active ingredient in the popular weedkiller brand Roundup, present in all but two of the 45 oat-derived products **that were sampled by the Environmental Working Group**, a public health organization. Nearly three in four of the products exceeded what the EWG classes safe for children to consume. Products with some of the highest levels of glyphosate include granola, oats and snack bars made by leading industry names Quaker, Kellogg's and General Mills, which makes Cheerios. In April, internal emails obtained from the Food and Drug Administration

¹ A description on the back cover of the Vintage 2007 edition of: *Brave New World* by Aldous Huxley, 1932.

² <https://www.theguardian.com/environment/2018/aug/16/weedkiller-cereal-monsanto-roundup-childrens-food>

(FDA) [showed](#) that scientists have found glyphosate on a wide range of commonly consumed food, to the point that they were finding it difficult to identify a food without the chemical on it. The FDA has yet to release any official results from this process. **The UK Guardian reported:** *“There was no indication that the claims related to products sold outside the US.”*

Shockingly high levels of weedkiller (two out of four contained aminomethylphosphonic acid, its most toxic metabolite) found in popular breakfast cereals marketed for British children

In view of this statement by the *Guardian*, we sent samples of four oat-based breakfast cereals marketed for children in the UK to the [Health Research Institute, Fairfield, Iowa](#), an accredited laboratory for glyphosate testing. [Kellogg No added sugar granola](#) with apricot and pumpkin seeds Barley Flakes 27% Oats 23% Rye 13% Wheat flour Oat flour; [Quaker Oat so Simple](#): Quaker Whole Grain Rolled Oats; [Weetabix Oatibix](#) 100% wholegrain oats; [Nestle Multigrain Cheerios](#): Whole Grain Oat Flour 29.6% Whole Grain Wheat 29.6% Whole Grain Barley Flour 17.9% Whole Grain Corn Flour 2.1% Whole Grain Rice Flour 2.1%. [The results are attached.](#)

[Dr Fagan the Director says:](#) *“These results are consistently concerning. The levels consumed in a single daily helping of any one of these cereals, even the one with the lowest level of contamination, is sufficient to put the person’s glyphosate levels above the levels that cause fatty liver disease in rats (and likely in people).*

I have included results for two “organic” products from the US for comparison. The granola has some glyphosate in. Even more concerning is the “organic” rolled oats that have the highest glyphosate levels of any product tested here. What this means is that, at least in the USA, organic integrity is less than perfect, to say the least! We have seen evidence of cheating before, but this is the worst!

In the US, weed killer found in granola and crackers, internal FDA emails show ³

“I have brought wheat crackers, granola cereal and corn meal from home and there’s a fair amount in all of them,” FDA chemist [Richard Thompson](#) wrote to colleagues in an email last year regarding glyphosate. Thompson, who is based in an FDA regional laboratory in Arkansas, wrote that broccoli was the only food he had “on hand” that he found to be glyphosate-free.

That internal FDA email, dated January 2017, is part of [a string of FDA communications](#) that detail agency efforts to ascertain how much of the popular weedkiller is showing up in American food. The tests mark the agency’s first-ever such examination. The FDA is charged with annually testing food samples for pesticide residues to monitor for illegally high residue levels. The fact that the agency only recently started testing for glyphosate, a chemical that has been used for over 40 years in food production, has led to [criticism](#) from consumer groups and the Government Accountability Office (GAO)”

The FDA has been testing glyphosate in food for nearly 2 years, but has not produced a Report⁴

A letter from Congressman Ted Lieu, a member of the Committee on the Judiciary in the House of Representatives, to Dr Gottlieb of the FDA asking him to clarify the practices around testing glyphosate in food and why they are not releasing them. He asks seven pertinent questions which he hopes the FDA will answer.

FDA Glyphosate Testing Conspicuously Skips Oats, Wheat Products⁵

Monsanto’s Roundup Weed Killer Detected on Two-Thirds of Corn and Soybean Samples
WASHINGTON – [The Food and Drug Administration failed to include oats and wheat products](#) in its glyphosate testing program, leaving Americans largely in the dark about their exposure through food

³ <https://www.theguardian.com/us-news/2018/apr/30/fda-weedkiller-glyphosate-in-food-internal-emails>

⁴ <https://lieu.house.gov/media-center/press-releases/rep-lieu-urges-fda-clarify-practices-around-testing-glyphosate-food>

⁵ <https://www.ewg.org/release/fda-glyphosate-testing-conspicuously-skips-oats-wheat-products>

to the active ingredient in Monsanto's Roundup weed killer. After sitting on the data from its glyphosate tests for more than a year, the FDA finally made the results public. Tests found glyphosate on 63 percent of corn samples and 67 percent of soybean samples. But FDA did not test any oats and wheat, the two main crops where glyphosate is used as a pre-harvest drying agent, resulting in glyphosate contamination of foods such as Cheerios and some brands of granola. "FDA's failure to test for glyphosate in the foods where it's most likely to be found is inexcusable," said Olga Naidenko, Ph.D, Senior Science Advisor for Children's Environmental Health at EWG. Instead, she said, the FDA tested milk and eggs for glyphosate, even though studies by independent researchers and Monsanto's own analysis show that glyphosate does not transfer into these products. In August, tests commissioned by EWG found glyphosate residues on popular oat cereals, oatmeal, granola and snack bars. Almost three-fourths of the 45 samples tested had glyphosate levels higher than what EWG scientists consider protective of children's health with an adequate margin of safety.

The amounts of Roundup sprayed by UK farmers on crops has gone from 226,762 kg in 1990 to 2,240,408 kg in 2016, a ten-fold increase. Distribution of glyphosate and aminomethylphosphonic acid (AMPA) is widespread in agricultural topsoils of the European Union⁶

Obesity in UK children began to rise before the age of 7 and between 7 and 14⁷

The Millennium Cohort Study (MCS) is a multi-disciplinary research project following the lives of around 19,000 children born in the UK in 2000-01. The six surveys of MCS cohort members carried out so far – at age nine months, three, five, seven, 11 and 14 years – have built up a uniquely detailed portrait of the children of the new century. The Age 14 Survey took place in 2015. Interviews were conducted with 11,726 families. Age 14 was when the MCS identified obesity, mental health disease and self-harm at the highest.

The **1970 British Cohort Study** (BCS70) is a continuing, multi-disciplinary longitudinal study monitoring the development of more than 17,000 babies born in the UK during the week of 5–11 April 1970. Since the birth survey in 1970, there have been eight sweeps of all cohort members at ages 5, 10, 16, 26, 30, 34, 38 and 42. The Centre for Longitudinal Studies (CLS) based at the Institute of Education University of London published their latest report on 9 November 2013.⁸

Their key findings of the cohort at age 42 were that:

- The generation born in 1970 is considerably more likely to be overweight or obese than those born 12 years earlier were at the same age.
- Men born in 1970 are far more likely to be overweight than women.

I wrote to the CLS to see when the next one would be published. They said: "*unfortunately, there has been a delay and the next one is unlikely to be out before 2019.*"

Neurotransmitter changes in the brain from exposure to Glyphosate-based Herbicides: many papers come from Latin American countries where they grow almost exclusively GM Roundup Ready Crops that Monsanto forced on them in 1996

Behavioral impairments following repeated intranasal glyphosate-based herbicide administration in mice. Taken together, our findings demonstrate that intranasal (IN) exposure to commercial Gly-BH produces alterations in locomotor activity, anxiety and memory in adult mice. These observations could be a consequence of alterations in neurotransmission systems comprising the GABAergic, dopaminergic, serotonergic and/or cholinergic systems." The intranasal route is the fastest route to the brain. In this research paper there are references to many papers from around the world that confirm the glyphosate-based herbicides are damaging to the development of the foetal brain and

⁶ <https://www.sciencedirect.com/science/article/pii/S0048969717327973>

⁷ <http://www.cls.ioe.ac.uk/page.aspx?&sitesectionid=2419&sitesectiontitle=MCS+Age+14+initial+findings>

⁸ [Overweight and obesity in mid-life: Evidence from the 1970 British Cohort Study at age 42](#)

that repeated exposure is toxic to the adult human brain and may result in alterations in locomotor activity, feelings of anxiety and memory impairment.⁹

There are so many mental health and psychiatric disorders, depression, suicides, anxiety and violence among children and adults; UK and US children are being given weedkiller at breakfast; unpublished emails showed FDA scientists could not find a food without Roundup in it.

Violent Behavior: A Solution in Plain Sight

Why is there an increasing incidence in unsociable behaviour, disorder, aggression, gun crime, and brutality in the UK and the US? This paper by Sylvia Onusic, PhD, CNS, LDN, seeks reasons for the increase in violent behaviour in America, especially among teenagers. She identifies malnutrition, vitamin and micronutrient deficiency as potent causes of aberrant behaviour, crime and the spectrum of autistic diseases. She says: *"Some children have been corrected by a proper diet free of junk food."*¹⁰ These are precisely the effects of exposure to glyphosate and other chemicals.

***"Britain is the most corrupt country in the world and London is the heart of global financial corruption"* said Italian author of a book about the mafia at the Hay Festival in May 2016**¹¹

Roberto Saviano who had been living under armed police guard for more than 10 years after writing an expose of the Neapolitan Camorra, said London's banking institutions were key components of "criminal capitalism", which laundered drug money through the offshore networks. He said that there was a hidden danger of voting to leave the European Union that was little discussed. He said if the UK left the EU, it would undermine joint attempts to fight illegal economies.

"Leaving the EU means allowing the Qatari societies, the Mexican cartels, the Russia Mafia to gain even more power," he said, highlighting the fact HSBC had paid \$1.9bn in fines to the US government for financial irregularities in dealing with money that had come from cartels.

He added: *"We have proof, we have evidence. Today, the criminal economy is bigger than the legal economy. Drug trafficking eclipses the revenue of oil firms. Cocaine is a £300bn-a-year business. Criminal capitalism is capitalism without rules. Mafia and organised crime does not abide by the rule of law – and most financial companies who reside offshore are exactly the same."*

Saviano also recalled how he had been moved to write the book that led to the Camorra telling him it would kill him. *"In my lifetime, more than 4,000 people have been killed in Naples and the surrounding area by the Camorra,"* he said. *"But when I was younger I did not have a clear perception of the criminal power that ruled that area."* He said that the murder of a priest in his home town radically changed his view. *"The priest was 30 years old and was shot in the face,"* he said. *"He had spoken out about the Camorra. He had said 'for the love of my people I will not keep quiet in the face of a dictatorship run by the Mafia. He called it a totalitarian power within a democracy, and wrote an essay denouncing them. He said by doing so, he felt he could influence the power that was around me."*

Saviano explained how his life had changed dramatically, aged 26, when he wrote Gomorrah, a book exposing the people in the Camorra and the way they acted. Saviano said: *"When I got myself into this situation and I could not imagine that it would end like this because many books have been written on the Mafia, but it was my book that made them so angry. My life is unique. I am followed by two bullet-proofed cars and by more than five officers and that brings about a feeling of guilt sometimes because you exposed yourself too much, you were not cautious enough. I live under police protection and have done so for 10 years. What got me into trouble wasn't so much that I wrote a book, but the way I wrote it. I named names and I stated facts. I took you to the crime scene."*

⁹ <https://www.sciencedirect.com/science/article/pii/S0892036217301526>

¹⁰ <http://www.westonaprice.org/environmental-toxins/violent-behavior-a-solution-in-plain-sight/pdf>

¹¹ <https://www.theguardian.com/books/2016/may/29/roberto-saviano-london-is-heart-of-global-financial-corruption>

The Gomorrah author on his new book about Italy's teenage mafia leaders, why he risks his life for his writing, and the UK's shameful corruption

In the *Observer* on 26 August 2018, Kathryn Bromwich interviewed him: In May 2016 you said the UK was the [most corrupt country in the world](#). Do you still think so?

*"Absolutely. I'm not sure why, but the UK thinks of itself as not particularly corrupt. It doesn't have a political class that's more corrupt than South America or Italy, and it doesn't have a more corrupt police force than Greece or Morocco. But it's the country with the dirtiest capital in the world. Because London has no financial rules: money laundering is the primary source of British financial wealth – the money from Russian or South American coke. And it's all legal. Maybe that's why Britain doesn't see it as particularly shameful – creating an economic system substantially based on the absence of financial regulation. It doesn't matter if it's blood money, from arms trafficking, from drugs. When I spoke about this in the UK, the perception was that it was something marginal."*¹²

The Westminster Government, Department of Health, Public Health England, Health and Safety Executive, Defra, the British Medical Association, the Science Media Centre and the UK Media have colluded with corporations against the people

In 2010, the government refused to legislate on the EU Directive Advice (2009/128/EC) on the Sustainable Use of Pesticides.¹³ Instead Defra said it would work with the agrochemical industry.

On 26 June 2012, a secret meeting was held between the Agricultural Biotechnology Council (ABC), representing industry, two UK Ministers, two MPs, Civil Servants, Scientists and NFU to discuss the barriers to introducing Genetically Modified Crops (GM) into Britain and how to overcome them.¹⁴ Dr Helen Wallace Director of Genewatch and Pete Riley Campaign Manager GM Freeze published a Press Release: [Monsanto meets Ministers to push return of GM crops to Britain. Roundtable discussion on 'Going for Growth': Realising the potential of agricultural technologies in the UK.](#)

In 2013 the British Government, Monsanto, the European Food Safety Authority (EFSA) and the EU Commission joined forces in EU Court: proceedings against civil society to prevent risky genetically engineered soybeans from being withdrawn from the food market.¹⁵

[Freedom of Information requests showed that GM companies](#) are running the Government's PR strategy on GM crops by controlling how public and private money will be invested in research.¹⁶

An Editorial in the *British Medical Journal* on 11/01/2014 was entitled: [A shameful episode](#).¹⁷

In series of articles commissioned by the BMJ, extensive investigations by Jonathan Gornall shows *"beyond doubt that commercial interests are currently in control of key decisions about the public's health."* The UK government did a sudden U-turn from its agreement that a minimum price on a unit of alcohol would be introduced across the United Kingdom. *"The evidence for substantial health savings and cost savings was clear. Scotland had introduced a minimum price (though now under legal challenge by the drinks industry) and the UK Prime Minister had given his personal commitment that England and Wales would follow suit."* Jeremy Browne the Home Office Minister said that the government didn't have *"enough concrete evidence."* However, Jonathan Gornall, in a BMJ investigation, discovered: *"the extent and effects of contact between ministers and interest groups*

¹² <https://www.google.com/url?q=https://www.theguardian.com/books/2018/aug/26/roberto-saviano-interview-gomorrah-piranhas&sa=U&ved=0ahUKEwiltpeCtIrdAhVOM-wKHcAqBLYQFggFMAA&client=internal-uds-cse&cx=007466294097402385199:m2ealvuxh1i&usg=AOvVaw2sN1xaJ0IIWjA50kSXpFGZ>

¹³ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0128>

¹⁴ <http://www.genewatch.org/article.shtml?als%5Bcid%5D=569457&als%5Bitemid%5D=571449>

¹⁵ <http://www.testbiotech.de/en/node/898>

¹⁶ http://www.genewatch.org/uploads/f03c6d66a9b354535738483c1c3d49e4/Fol_summary_May14.pdf

¹⁷ <http://www.bmj.com/content/348/bmj.g110>

lobbying against the minimum unit price... Almost half of MPs are members of the All-Party Parliamentary Group supporting the beer industry, and undisclosed numbers belong to groups supporting other alcohol producers.”

Gornall concluded that the consultation itself was a sham. **“While MPs struggled to gain access to ministers, representatives of alcohol companies and major supermarkets had easy access – made easier by the well-oiled revolving doors between industry and special advisory posts.”** Academics quoted by Gornall express concern about the misuse of the scientific process by the alcohol industry and its mouthpiece. “Alcohol companies were using tactics reminiscent of the tobacco industry.”

“An investigation by The BMJ has uncovered evidence of the extraordinary extent to which key public health experts are involved with the sugar industry and related companies responsible for many of the products blamed for the obesity crisis through research grants, consultancy fees, and other forms of funding.” Industry representatives found it easier to gain access David Cameron than his own MPs. Documents released under a freedom of information request showed that between the coalition taking power in May 2010 and the end of 2013 the Department of Health alone had **130 meetings** with representatives of the industry.

The former *Independent* newspaper (now online) revealed that David Cameron met 26 times with officials of Murdoch's News Corporation in the first 14 months of office, more than twice the number of visits he has had with any other media organization.¹⁸

Jonathan Gornall for the BMJ again highlighted the poor record of Public Health England (which took over from the Health Protection Agency on April 1 2013) at protecting the public.

PHE's first Report of the Impact of Fracking concluded that the risks to public health were low. But researchers from the American Chemical Society scoured databases and reports to compile a list of the chemicals commonly used in fracking. They assembled a list of 190 of them, and considered their properties. For around one-third of them, there was very little data about health risks, and eight of them were toxic to mammals.¹⁹ *“Fracking is a highly controversial technique, and has not been handed a clean bill of health by the scientific societies”*. On 25 November 2016 it was revealed that: *“Ministers deliberately delayed a controversial fracking report it was being forced to publish until after crucial council decisions on planning permission.* The Defra Report, highly redacted, showed fracking could affect house prices, health and the environment.²⁰

The Long Read on 30/08/2018: How America's most reckless billionaire created the fracking boom,²¹ showed what the greedy and corrupt UK government hasn't read: *“Because so few fracking companies actually make money, the most vital ingredient in fracking isn't chemicals, but capital, with companies relying on Wall Street's willingness to fund them. If it weren't for historically low interest rates, it's not clear there would even have been a fracking boom at all.”*

Three jailed for peaceful protest against fracking in Lancashire. Fracking is a process so dangerous that it has been banned in Germany and France.

The court heard this week that the jailing of the men (a teacher, a soil scientist and a piano tuner) meant they were the first to receive custodial sentences for environmental protest in the UK since the mass trespass on Kinder Scout in the Peak District in 1932, which marked the beginning of the right-to-roam movement. Another defendant, Julian Brock, 47, was given a 12-month suspended sentence after pleading guilty to the same offence. The men became the first to receive a custodial sentence for environmental protests against shale gas extraction this week. Simon Roscoe Blevins, 26, and Richard Roberts, 36, were given 16 months in prison and Richard Loizou, 31, was sentenced

¹⁸ <https://www.independent.co.uk/news/uk/politics/revealed-camerons-26-meetings-in-15-months-with-murdoch-chiefs-2314550.html>

¹⁹ <http://fracfocus.org/chemical-use/what-chemicals-are-used>

²⁰ <https://www.gov.uk/government/publications/shale-gas-extraction-review-of-the-potential-public-health-impacts-of-exposures-to-chemical-and-radioactive-pollutants>

²¹

<http://click.mail.theguardian.com/?qs=eda5e9fba4a384a2e0551dcd6f616b7ec38bcf8b7662f31ba3168595ca45ee8fc8907ee28413da37a0cab0585d2764c65>

to 15 months in jail on Wednesday after being convicted of causing a public nuisance by a jury at Preston crown court in August.

In a message that has been released as the men wait in Preston prison to be moved to jails elsewhere in the country, Loizou said he would miss everything about his life outside while serving his sentence.²² But he added: *“I think we will win, because this is a last-ditch attempt to squeeze the remaining fossil fuels from the earth. It is like industry clinging on to an old paradigm of the way things operate.”*

“The handling of the evidence for its controversial report on e-cigarettes (19 August 2015) adds to questions about the credibility of PHE’s advice.” This review of the evidence on e-cigarettes reported that *‘e-cigarettes are 95% safer than tobacco.’*²³ PHE has advised them to be given on prescription by GPs to smokers who had difficulty in giving up smoking.²⁴

The Royal Commission on Environmental Pollution was abolished on 1 April 2011, as part of the Coalition Government’s spending cuts. It had been created under Royal Warrant in 1970 to advise the Queen, Government, Parliament and the public on environmental issues.²⁵ It had criticized the Government (among other things) for allowing aerial spraying of pesticides and not protecting rural citizens from by-stander effects of multiple pesticides.

Ministers to consult on banning energy drink sales to children under their obesity strategy²⁶

“On 30 August 2018, Ministers will consult on banning the sale of Red Bull, Monster Energy and other energy drinks to children in England amid growing concern about the impact that the high-caffeine, high-sugar drinks are having on young people’s health. The highest level of sugar is 78 g (20 sugar cubes) and 160mg caffeine (equivalent of two espressos).” In **2013** EFSA examined specific “energy” drink consumption habits – co-consumption with alcohol or consumption associated with intense physical exercise – among adolescents and adults.²⁷ Children (3-10 years): Approximately 18% of those interviewed were consumers of “energy” drinks. Among these, around 16% were “high chronic” consumers, with average consumption of 0.95 litres a week (almost 4 litres per month).

The Open Letter from America was from more than 60 million American citizens²⁸

to David Cameron on 12/11/2014 (and the rest of the EU) warning them not to authorize GM crops and/or glyphosate because of the devastating effects on human health and the environment. Extracts: *“In our country, GM crops account for about half of harvested cropland. Around 94% of the soy, 93% of corn (maize) and 96% of cotton grown is GM. The UK and the rest of the EU have yet to adopt GM crops in the way that we have, but you are currently under tremendous pressure from governments, biotech lobbyists, and large corporations to adopt what we now regard as a failing agricultural technology...Studies of animals fed GM foods and/or glyphosate, however, show worrying trends including damage to vital organs like the liver and kidneys, damage to gut tissues and gut flora, immune system disruption, reproductive abnormalities, and even tumors.”*³⁵...These scientific studies point to potentially serious human health problems that could not have been anticipated when our country first embraced GMOs, and yet they continue to be ignored by those

²² <https://www.theguardian.com/environment/2018/sep/27/jailed-anti-fracking-activists-release-defiant-video-message>

²³

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733022/E-cigarettes_an_evidence_update_A_report_commissioned_by_Public_Health_England_FINAL.pdf

²⁴ <http://www.healthbusinessuk.net/news/06022018/make-e-cigarettes-available-prescription-says-phe>

²⁵ https://en.wikipedia.org/wiki/Royal_Commission_on_Environmental_Pollution

²⁶

<http://click.mail.theguardian.com/?qs=d701c7aaa0bc8bbcbac983e63264044984e6a908aeae049aa8c7d92220c0318c72ccc4f67ffd8545c7f8d4054ea95392>

²⁷ <https://www.efsa.europa.eu/en/press/news/130306>

²⁸ www.theletterfromamerica.org

who should be protecting us. Instead our regulators rely on outdated studies and other information funded and supplied by biotech companies that, not surprisingly, dismiss all health concerns.

Through our experience we have come to understand that the genetic engineering of food has never really been about public good, or feeding the hungry, or supporting our farmers. Nor is it about consumer choice. Instead it is about private, corporate control of the food system.

Americans are reaping the detrimental impacts of this risky and unproven agricultural technology. EU countries should take note: there are no benefits from GM crops great enough to offset these impacts. Officials who continue to ignore this fact are guilty of a gross dereliction of duty.

If the UK and the rest of Europe becomes the new market for genetically modified crops and food our own efforts to label and regulate GMOs will be all the more difficult, if not impossible. If our efforts fail, your attempts to keep GMOs out of Europe will also fail.

If we work together, however, we can revitalize our global food system, ensuring healthy soil, healthy fields, healthy food and healthy people.”

Most countries in the EU took that advice and opted out of GM (including Scotland, Wales and Ireland).

David Cameron ignored that advice on behalf of England. He and Defra concealed the letter from the British public. The European Commission and the European Food Safety Authority also ignored it and continued to approve GM Crops for growing and for food and feed in the EU

This was despite these grave warnings from American citizens of their experiences (Living with GMOs) and from independent organisations in Europe, such as Testbiotech (Germany), CRIIGEN (France), Corporate Europe Observatory, Earth Open Source, Greenpeace and Pesticides Action Network.

Biocides Regulations in the European Union makes a lot of money for ECHA

REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances): The Biocidal Product Regulation (BPR, Regulation (EU) 528/2012) concerns the placing on the market and use of biocidal products, which are used to protect humans, animals, materials or articles against harmful organisms, like pests or bacteria, by the action of the active substances contained in the biocidal product. *“REACH is a regulation of the European Union, adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals, while **enhancing the competitiveness of the EU chemicals industry.** It also promotes alternative methods for the hazard assessment of substances in order to reduce the number of tests on animals.”*

A global industry has emerged to advise on Biocides Regulation. The British Government is making a lot of money out of it because BiocidesHub and the Yordas Groups are both based in the UK

As with the regulation of pesticides, it is controlled by the pesticides industry and based in the UK.

Biocides Symposia are held regularly around the world to *“get up-to-speed on all that’s new in biocidal products regulation”* to *“stay one step ahead.”* Courses are from £300-400 per day to \$1585 for a Symposium. A multitude of firms have clients from *‘industry, crop protection and government’*.

Chemical Watch **BiocidesHub** (Shrewsbury) offered 13 Events on Biocides Regulation in 2016, ranging from beginners’ courses to advanced courses. Many more are being offered in 2018 in anticipation of Brexit. There appears to be so much demand for places on REACH training courses that a new ‘hub’ has been set up in Lancaster. *“Originally founded as ‘The REACH Centre’ in 2007, the Company was set up to meet the needs of industry to comply with the EU REACH Regulation. From its inception, substantial re-investment allowed the business to rapidly expand and develop capacity in a wealth of new scientific and regulatory disciplines. Chemtrac, our globally renowned on-line product stewardship management system was introduced in 2011. In order to reflect the increasingly diverse nature of our business and research activities, the Company was re-branded as ‘Yordas Group’ and from 01/11/2017 is based in Lancaster Environment Centre.”* According to Chemical Watch’s Training

Manager, they run separate training courses for REACH but sometimes they run training courses together which Chemical Watch organise and facilitate. **BIOCIDES HAVE NO PLACE IN AGRICULTURE. A BIOCIDES IS A SUBSTANCE THAT IS KILLING ALL LIFE.** Biocides are also used in industrial processes.

BiocidesHub says confusion has arisen over California's Prop 65 that has to label carcinogens²⁹

Monsanto was forced to label Roundup a carcinogen after court dismissed Monsanto's appeal.³⁰ Chemical Watch Executive Ms Sim said: "More than a month after updated warning requirements came into force for California's Proposition 65, the regulated community is still grappling with the changes and a new wave of private enforcement litigation looms. A unique aspect to Prop 65 is that private persons or organisations can take legal action against alleged violators of the law, and are awarded 25% of penalties assessed. This has given rise to an active – and often lucrative – litigation scene. Ms Sim said that a safe harbour warning is exactly that – a form of providing warning that can provide an affirmative defense in a lawsuit. Companies, however, retain the ability to provide different warnings and, if faced with litigation, could argue that the alternative they provided was "clear and reasonable". But "that's a risk that most businesses aren't willing to take," Ms Sim said."

Report presented to UN Human Rights Council about the Right to Food

Global Agricultural Corporations are severely criticised by Hilal Elver the UN Special Rapporteur on the right to food.³¹ The Report presented to the UN human rights council on 08/03/2017 is severely critical of the global corporations that manufacture pesticides, accusing them of the "systematic denial of harms", "aggressive, unethical marketing tactics" and heavy lobbying of governments which has "obstructed reforms and paralysed global pesticide restrictions".

The report authored by Hilal Elver the UN Special Rapporteur on the right to food and co-authored by Baskut Tuncak, the UN's special rapporteur on toxics, says pesticides have "catastrophic impacts on the environment, human health and society as a whole", including an estimated 200,000 deaths a year from acute poisoning. Its authors said: "It is time to create a global process to transition toward safer and healthier food and agricultural production."

"It is a myth," said Hilal Elver. "Using more pesticides is nothing to do with getting rid of hunger."³² According to the UN Food and Agriculture Organisation (FAO), we are able to feed 9 billion people today. Production is definitely increasing, but the problem is poverty, inequality and distribution." Elver said many of the pesticides are used on commodity crops, such as palm oil and soy, not the food needed by the world's hungry people: "The corporations are not dealing with world hunger, they are dealing with more agricultural activity on large scales."

Extracts from the Report: "excessive use of pesticides is very dangerous to human health, to the environment and it is misleading to claim they are vital to ensuring food security. Chronic exposure to pesticides has been linked to **cancer, Alzheimer's and Parkinson's diseases, hormone disruption, developmental disorders and sterility.** Farmers and agricultural workers, communities living near plantations, indigenous communities and pregnant women and children are particularly vulnerable to pesticide exposure and require special protections. The experts warn that certain pesticides can persist in the environment for decades and pose a threat to the entire ecological system on which food production depends. The excessive use of pesticides contaminates soil and water sources, causing loss of biodiversity, destroying the natural enemies of pests, and reducing the nutritional

²⁹

<https://chemicalwatch.com/70738/california-prop-65-requirements-trigger-compliance-confusion?pa=true>

³⁰ <https://sacramento.cbslocal.com/2017/01/27/court-rules-against-monsanto-allows-california-to-put-cancer-warning-on-roundup/>

³¹ <http://www.pan-uk.org/site/wp-content/uploads/United-Nations-Report-of-the-Special-Rapporteur-on-the-right-to-food.pdf>

³² <https://www.theguardian.com/environment/2017/mar/07/un-experts-denounce-myth-pesticides-are-necessary-to-feed-the-world>

value of food. The impact of such overuse also imposes staggering costs on national economies around the world. The experts say the use of neonicotinoid pesticides is particularly worrying because they are accused of being responsible for a systematic collapse in the number of bees around the world. For example, heavy use of these insecticides has been blamed for the 50 per cent decline over 25 years in honeybee populations in both the United States and the United Kingdom of Great Britain and Northern Ireland. Such a collapse, they say, threatens the very basis of agriculture as 71% of crop species are bee-pollinated."

The Royal Society of Medicine Conference on pesticides safety in November 2017³³

At the Royal Society of Medicine Conference on pesticides safety the Soil Association organised by its Policy Director, the late Peter Melchett, presented alarming figures. Under FOI request FERA Science (previously a government agency, now privatized) provided figures that showed that the number of active ingredients applied to wheat had risen **12-fold** from 1.7 in 1974 to 20.7 in 2014; that those applied to potatoes had risen **5.8** times from 5.3 in 1975 to 30.8 in 2014; that those applied to onions and leeks had risen **18-fold** from 5.3 in 1975 to 30.8 in 2014. Pesticides are tested individually but no one tests the cocktail of pesticides to which humans and the environment are exposed. **The Chief Scientist for Defra Professor Ian Boyd** pointed out that once a pesticide is approved there is no follow up. Dr Michael Antoniou, head of the Gene Expression and Therapy Group at King's College London, told the Royal Society of Medicine conference that the adjuvants in commercial pesticide formulations can be toxic in their own right and in some cases more toxic than the declared active ingredients. Yet only the active ingredients are tested and assessed for long-term health effects in the regulatory process. Dr Antoniou also said that research on hormone-disrupting chemicals, including pesticides, shows that very low realistic doses can be more toxic than higher doses. Professor Carl Leifert talked about pesticides linked to low sperm quality. In a recent study, published in JAMA Internal Medicine, Harvard researchers followed 325 women at an infertility clinic and found that women who regularly ate pesticide-treated fruits and vegetables had lower success rates getting pregnant with IVF, while women who ate organic food had reduced risk of pregnancy loss and increased fertility.

Dave Bench Head of UK Chemicals Regulation Division described the regulatory system for pesticides as robust and as balancing the risks of pesticides against the benefits to society.

It was therefore astounding to see the complete denial of the NFU and Defra about the 2016 State of Nature Report. NFU vice-president Guy Smith said "intensification of farming had ended in the early 1990s." that farmers "were using less fertiliser and pesticides than ever" and a spokeswoman from Defra said: "Protecting our precious environment and supporting our world-leading farmers, a cornerstone of our economy, will form an important part of our EU exit negotiations."

The NFU, Defra, CRD and HSE are deliberately colluding to mislead the public.

Healthy Harvest with up to 320 pesticides

The National Farmers' Union (NFU), the Crop Protection Association (CPA) and Agricultural Industries Confederation (AIC) launched *Healthy Harvest – safeguarding the crop protection toolbox* in June 2014.³⁴ The NFU and pesticide companies continually defend the use of pesticides for economic reasons and complain at any attempt to restrict the more than 320 at their disposal. CPA, AIC and the NFU commissioned Andersons to write a Report: The effect of the loss of plant protection products (i.e. pesticides) on UK Agriculture and Horticulture that predicted dire economic effects on UK farming if pesticides were restricted.³⁵

³³ <https://www.soilassociation.org/news/2017/november/rapid-increase-in-pesticide-use-and-new-evidence-of-health-impacts-of-very-low-doses/>

³⁴ <https://cropprotection.org.uk/newsroom/2014/industry-working-together-to-safeguard-the-crop-protection-toolbox/>

³⁵ http://www.cropprotection.org.uk/media/89364/andersons_final_report.pdf

Swansea Council had employed Monsanto's Contractor Complete Weed Control to spray an unmonitored amount of Roundup on Japanese knotweed in woodland close to our reserve

In 2011 we noticed that we were starting to lose spiders, moths, butterflies, spiders, beetles and other invertebrates. We sampled river and tap water in 2013 and 2014 and found glyphosate present. In August 2014, the amounts in tap water had increased ten-fold, from 30ppt to 300ppt. These were of the order of concentrations found in a study in 2013 which showed that breast cancer cell proliferation is accelerated by glyphosate in extremely low concentrations: *"The present study used pure glyphosate substance at log intervals from 10⁻¹² to 10⁻⁶ M. These concentrations are in a crucial range which correlated to the potential biological levels at part per trillion (ppt) to part per billion (ppb) which have been reported in epidemiological studies."*³⁶ Between April 2016 and October 2017 more than 3.5 tonnes of Roundup (Dakar Pro) were sprayed on 3,000 km pavements, ward by ward in a 'war on weeds' for the 'benefit of tourists.' Our solitary bee hotel was full in July 2016. By July 2017 it was empty. We finally lost our dragonflies. From March 2014 we asked the CRD/HSE/Defra to stop the Council from spraying Roundup because it was poisoning our nature reserve, we told them the results of glyphosate monitoring and the that the incidence of breast cancer had doubled between 1975 and 2010. They refused to comply. They said Roundup was still legal. Eventually in October 2017 I was invited to fill in an HSE incident form. This was their reply.

Subject:Concern submitted to HSE

Date:Mon, 13 Nov 2017 12:45:07 +0000

From:noreplyconcerns@hse.gov.uk

To:rosemary.mason01@btinternet.com

Dear Dr Mason,

Thank you for your concern about glyphosate use in Swansea dated 27 October 2017.

We have considered the information you have provided and consulted other colleagues in HSE. We will not be investigating as there doesn't appear to be any breach of legislation enforced by HSE. You have received HSE's comments and views about the product and its application in earlier correspondence.

Regards

Concerns Team

Health and Safety Executive

This is a no-reply email account. Replies will not be received at HSE

We sent our photo-journals to Bernhard Url Executive Director of EFSA, Michael Flüh former Head of Unit Pesticides and Biocides, Health and Consumers Directorate General European Commission, Geert Dancet, former Executive Director of ECHA and Dr Mark Porter former Chairman of the BMA Only Geert Dancet acknowledged them. Dr Mark Porter locked my email address out, so I was unable to contact the BMA. The BMA were voting with EFSA, that glyphosate wasn't a carcinogen.

European Chemical Agency harmonised classification of glyphosate 15 March 2017 Helsinki

*"ECHA's Committee for Risk Assessment (RAC) agrees to maintain the current harmonised classification of glyphosate as a substance causing serious eye damage and being toxic to aquatic life with long-lasting effects. RAC concluded that the available scientific evidence did not meet the criteria to classify glyphosate as a carcinogen, as a mutagen or as toxic for reproduction."*³⁷

Jack de Bruijn, in charge of risk assessment, explains that ECHA's role is in the labelling and classification of chemicals. *"We only look at the hazardous properties of a chemical,"* he said, *"not at the risks that occur when you use a chemical."* Thus, they could happily acknowledge our books!

³⁶ <https://www.ncbi.nlm.nih.gov/pubmed/23756170>

³⁷ <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>

Wales-on-line: “Welsh Councils all use ‘carcinogenic’ weedkiller: glyphosate-based herbicides”

“Glyphosate is the world’s most common weed-killer and is used by the majority of local authorities on areas such as highways, footpaths and parks. Following our requests for details on whether councils use the specific brand Roundup or products with glyphosate in, many pointed to its approval for use by regulatory bodies.”³⁸ There must be many areas in Wales that have lost biodiversity.

Monsanto found guilty of concealing that Roundup caused cancer

At a lawsuit in the US on 10 August 2018, Monsanto was found guilty of concealing (with malicious intent) the fact that Roundup caused cancer. A terminally ill groundsman who has advanced Non-Hodgkin’s Lymphoma was awarded \$289 million by a unanimous decision by the jury.³⁹ There are more than 4,000 plaintiffs waiting for their opportunity to sue in October 2018.

[California-Jury finds in favour of Plaintiff against Monsanto - Nearly three hundred million dollars awarded against Monsanto](#)

BBC News and ITN C4 News reported on the Court Verdict, but there is no public record of it

On 11 August 2018, the BBC 10 o’clock news and Fatima Manji C4 news showed extracts from the US Court where Judge Bolanos announced the unanimous verdict of the jury and Dewayne (Lee) Johnson thanked his legal team.

But the BBC reporter said the British Government had no intention of banning Roundup and quoted Cancer Research UK as saying that in the UK there was no evidence that Roundup caused cancer.

On 11 August 2018 the C4 news report from the Team at C4 news is missing and the BBC 10 o'clock news is missing from the BBC I-Player. **Did Monsanto ask the BBC and ITN to remove them so there would be no record of the Lawsuit in the UK media?**

Cancer Research UK protects the Agrochemical Industry: the CRUK website claims ‘there is little evidence that pesticides cause cancer’

Michael Pragnell former Chairman of Cancer Research UK (2010-2017), founder of Syngenta and former Chairman of CropLife International was awarded a CBE in 2017 for services to cancer research. CropLife International was founded in 2001.⁴⁰ As of 2015 CropLife International’s member list includes the following 8 companies: [BASF](#), [Bayer CropScience](#), [Dow AgroSciences](#), [DuPont](#), [FMC Corp.](#), [Monsanto](#), [Sumitomo](#) and [Syngenta](#). Many of these make their own formulated glyphosate. CRUK said that there was little evidence that pesticides caused cancer. CRUK, the CMO England and PHE, linked cancer to alcohol, obesity and smoking. They blamed the people for 'lifestyle choices'.

The Francis Crick Institute with its ‘world class resources’ is failing to improve people’s lives with its treatments, but is definitely strengthening the economy of the pesticides industry and the pharmaceutical industry

Report: *“The Francis Crick Institute is a biomedical discovery institute dedicated to understanding the fundamental biology underlying health and disease. Its work is helping to understand why disease develops and to translate discoveries into new ways to prevent, diagnose and treat illnesses such as cancer, heart disease, stroke, infections, and neurodegenerative diseases.”⁴¹*

An independent organisation, its founding partners are the Medical Research Council (MRC), Cancer Research UK, Wellcome, UCL (University College London), Imperial College London and King's College London. The Crick was formed in 2015, and in 2016 it moved into a brand-new state-of-the-art building in central London which brings together 1500 scientists and support staff working collaboratively across disciplines, making it the biggest biomedical research facility under a single

³⁸ <https://www.walesonline.co.uk/news/local-news/welsh-councils-use-carcinogenic-weedkiller-15086510>

³⁹ <https://www.courthousenews.com/jury-finds-monsanto-liable-in-roundup-cancer-trial/>

⁴⁰ https://www.vinci.com/vinci.nsf/en/management-board-directors/pages/michael_pragnell.htm

⁴¹ <https://www.crick.ac.uk/about-us/>

roof in Europe. The Francis Crick Institute will be world-class with a strong national role. Its distinctive vision for excellence includes commitments to collaboration; to developing emerging talent and exporting it to the rest of the UK; to public engagement; and to helping turn discoveries into treatments as quickly as possible to improve lives and strengthen the economy."

In the UK there were 13,605 new cases of Non-Hodgkin Lymphoma in 2015 (and 4,920 deaths in 2016)⁴²

There were 41,804 new cases of bowel cancer in 2015 (and 16,384 deaths in 2016); 12,547 new cases of kidney cancer in 2015 (and 4,619 deaths in 2016); 5,736 new cases of liver cancer in 2015 (5,417 deaths in 2016); 15,906 new cases of melanoma in 2015 (2,285 deaths in 2016); 3,528 new cases of thyroid cancer in 2015 (382 deaths in 2016); 10,171 new cases of bladder cancer in 2015 (5,383 deaths in 2016); 8,984 new cases of uterine cancer in 2015 (2,360 deaths in 2016); 7,270 cases of ovarian cancer in 2015 (4,227 deaths in 2016); 9,900 new cases of leukaemia in 2015 (4,712 deaths in 2016); 55,122 new cases of invasive breast cancer in 2015 (11,563 deaths in 2016); 46,388 new cases of lung cancer in 2015 (and 35,620 deaths in 2016); 47,151 new cases of prostate cancer in 2015 (11,631 deaths in 2016); 9,211 new cases of oesophageal cancer in 2015 (8,004 deaths in 2016) and 5,540 new cases of myeloma in 2015 (3,079 deaths in 2016); 2,288 new cases of testicular cancer in 2015 (57 deaths in 2016); 9,921 new cases of pancreatic cancer in 2015 (9,263 deaths in 2016); 11,432 new cases of brain cancer in 2015 (5,250 deaths in 2016). In the US in 2014 there were 24,050 new cases of myeloma.

Each year there are steady increases in the numbers of new cancers, and increases in deaths from the same cancers, with no treatments making any difference to the numbers.

In 2011, CRUK began donating money (£450 million/year) to the Government's Strategy for UK Life Sciences and AstraZeneca provided 22 compounds to academic research to develop medicines.⁴³

The Monsanto Papers formed the basis of the successful Lawsuit against Monsanto

McHenry Leemon B Department of Philosophy, California State University, Northridge, California who exposed the fraud by the pharmaceutical industry, turns to the fraud committed by Monsanto. Research Paper: The Monsanto Papers: Poisoning the Scientific Well. *International Journal of Risk and Safety in Medicine.*⁴⁴

OBJECTIVE: Examination of de-classified Monsanto documents from litigation in order to expose the impact of the company's efforts to influence the reporting of scientific studies related to the safety of the herbicide, glyphosate.

METHODS: A set of 141 recently de-classified documents, made public during the course of pending toxic tort litigation, *In Re Roundup Products Liability Litigation* were examined.

RESULTS: The documents reveal Monsanto-sponsored ghost-writing of articles published in toxicology journals and the lay media, interference in the peer review process, behind-the-scenes influence on retraction and the creation of a so-called academic website as a front for the defense of Monsanto products.

CONCLUSION: The use of third-party academics in the corporate defense of glyphosate reveals that this practice extends beyond the corruption of medicine and persists in spite of efforts to enforce transparency in industry manipulation.

The UK Science Media Centre is sponsored by corporations not by NGOs or Unions

⁴² <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/non-hodgkin-lymphoma>

⁴³ <https://www.gov.uk/government/publications/uk-life-sciences-strategy>

⁴⁴ <https://content.iospress.com/articles/international-journal-of-risk-and-safety-in-medicine/irs180028>

Colin Macilwain, a science policy writer from Edinburgh who has worked as a reporter and an editor from both sides of the Atlantic wrote about plans to replicate Britain's Science Media Centre (SMC) in the United States, which he said was "*fraught with danger.*"⁴⁵

Extracts: "*The London SMC was set up because UK scientific leaders were upset that environmentalists had successfully fought the introduction of genetically modified food; they felt that the UK media were too susceptible to environmental scare stories about new technologies. Despite the fears of the SMC founders, the British press — led by the BBC, which treats the Confederation of British Industry with the deference the Vatican gets in Rome — is overwhelmingly conservative and pro-business in its outlook. It is quite unperturbed by the fact that SMC sponsors include AstraZeneca, BP, Coca-Cola, L'Oreal, Monsanto, Syngenta (as well as Nature Publishing Group) but not a single environmental non-governmental organization (NGO) or trade union.*

Fiona Fox, the SMC's director, says that the centre operates independently of its sponsors and points out that none (except its host, a Medical Charity, the Wellcome Trust) accounts individually for more than 5% of its income. She adds that no NGOs are involved because it was their public-relations skills that the founders of the SMC sought to match."

Macilwain goes on to say: "*But the perception that the environmental group Friends of the Earth constitutes a bigger threat to scientific truth-telling than some of the corporate names on the SMC's sponsorship list is not one the US media would accept. Some of those considering a US centre share these concerns. They think that their funding model will have to rely on charitable trusts, not companies or government agencies.*

UK's Science Media Centre lambasted for pushing corporate science⁴⁶

The meeting of global science writers in Bath in 2014 concluded: "*Journalists who uncritically report on SMC briefings and quotes sent by the centre are being taken for a ride by a lobby organisation instead of a neutral science information provider.*" Connie St Louis, former president of the Association of British Science Writers and a senior lecturer at City University, London said: "*I would close down the UK Science Media Centre.*" She conducted a small study on the centre's impact on UK science reporting in the 12 national newspapers in 2011 and 2012. The SMC's main activities include sending out 'expert reactions' — quotes on issues in the news — and holding media briefings, essentially small press conferences with a few experts. She found that more than half the SMC's expert reactions were covered in the press and, in 23 per cent of the stories that included these, the only quotes were those that came from the centre.

David Miller, a professor of sociology from the University of Bath, United Kingdom, presented a scathing analysis of the SMC, based on a combination of methods, such as analysing the SMC's website content and sending out freedom of information requests. He looked at which experts the centre uses — given that its mission is to get scientists' views across. What he found was that some 20 of the 100 most quoted experts were not scientists, as defined by having a PhD and working at a research institution or a top learned society. Instead they were lobbyists for and CEOs of industry groups. In 2012, the UK SMC, EFSA and GMO lobbyists suppressed the paper by Séralini and his team.

Séralini's 2-year feeding study provoked chronic hormone and sex dependent pathologies in rats; males developed tumours at 4 months and females at 7 months

"The health effects of a Roundup®-tolerant genetically modified maize (from 11% in the diet), cultivated with or without Roundup®, and Roundup® alone (from 0.1 ppb in water), were studied 2 years in rats. In females, all treated groups died 2–3 times more than controls, and more rapidly. This difference was visible in 3 male groups fed GMOs. All results were hormone and sex dependent, and the pathological profiles were comparable. Females developed large mammary tumours almost

⁴⁵ <https://www.nature.com/news/two-nations-divided-by-a-common-purpose-1.10224?nc=1376335775294>

⁴⁶ <https://www.scidev.net/global/journalism/feature/uk-s-science-media-centre-lambasted-for-pushing-corporate-science.html>

always more often than and before controls, the pituitary was the second most disabled organ; the sex hormonal balance was modified by GMO and Roundup® treatments. In treated males, liver congestions and necrosis were 2.5–5.5 times higher. This pathology was confirmed by optic and transmission electron microscopy. Marked and severe kidney nephropathies were also generally 1.3–2.3 greater. Males presented 4 times more, large palpable tumors (kidney) than controls which occurred up to 600 days earlier. Biochemistry data confirmed very significant kidney chronic deficiencies; for all treatments and both sexes, 76% of the altered parameters were kidney related. These results can be explained by the non-linear endocrine-disrupting effects of Roundup®, but also by the overexpression of the transgene in the GMO and its metabolic consequences.”

Prof Gilles-Eric Séralini was awarded Whistleblower of the Year 2015 (a shared award) by German Scientists for his work on the toxicity of GMOs and Glyphosate⁴⁷

Citation from German Scientists: “He was the first to publish animal test results demonstrating the toxic and carcinogenic properties of the most commonly used herbicide worldwide, the glyphosate-based “Roundup” by carrying out a two-year feeding test on rats. After the research was published, Prof Séralini was attacked by a vehement campaign by ‘interested circles’ from the chemical industry as well as the industry-financed British Science Media Centre.”

Georgina Downs founded Pesticides Campaign UK in 2001 to protect rural residents and schools from crop spraying of toxic chemicals⁴⁸

“People move to the countryside thinking it will be a healthy environment to bring up their children and do not know about the dangers and risks inherent in the spraying of poisonous chemicals on surrounding fields, until they themselves suffer adverse effects on their health”

*Extracts: “The existing UK Government policy and approvals system fundamentally fails to protect people in the countryside from pesticides, particularly rural residents. There are serious flaws in the approach to exposure and risk assessment for public health. “The **reality of crop spraying in the countryside** is not merely related to exposure to one individual pesticide or to one single group of pesticides, as agricultural pesticides are rarely used individually but commonly sprayed in mixtures (cocktails) -- quite often a mixture will consist of 4 or 5 different products. Each product formulation in itself can contain a number of different active ingredients, as well as other chemicals, such as solvents, surfactants and co-formulants (some of which can have adverse effects in their own right, before considering any potential synergistic effects in a mixture(s)). Studies have shown mixtures of pesticides (and/or other chemicals) can have synergistic effects.*

*The fact that, to date, there has never been **any** assessment in the UK of the risks to health for the long term exposure for those who live in the locality of pesticide sprayed fields, and/or who go to school in the locality of sprayed fields, means that under EU law **pesticides should never have been approved for use in the first place for spraying in the locality of residents’ homes, schools, children’s playgrounds, among other areas.** Children are particularly vulnerable to the effects of pesticide exposure because their bodies cannot efficiently detoxify chemicals, as their organs are still growing and developing. Also, when children are exposed at such a young age they will obviously have a longer lifetime to develop long-term chronic effects after any exposure.”*

Ms Downs won a legal battle in the High Court. The Court of Appeal overturned it

Ms Downs has fought legal battles against Defra. She had a landmark victory in the High Court in November 2008 that ruled that the UK Government’s policy on pesticides was not in compliance with European legislation. It was the first known legal case of its kind to reach the High Court to directly challenge the Government’s pesticide policy and approach regarding crop spraying in rural areas.⁴⁹ However, the Court of Appeal overturned the High Court Judgment in May 2009.

⁴⁷ https://vdw-ev.de/wp-content/uploads/2016/07/full_reasoning_whistleblower_seralini_en.pdf

⁴⁸ <http://www.pesticidescampaign.co.uk>

⁴⁹ http://www.pesticidescampaign.co.uk/georgia_high_court_victory.htm

Chief Executive, Kerr Wilson's Witness Statements cited various reasons for preserving the *status quo*. They were related to alleged financial and economic impacts on manufacturers, farmers and distributors, or the impact on agricultural productivity. On behalf of Defra he did not display any concern whatsoever in relation to the protection of public health. His main concern was with protection of industry and business interests. *"The annual market value of pesticide sales is approximately £490m which delivers benefits to farmers, significantly improving agricultural productivity...If, as a result of the Declaration, new approvals could not be granted, there would be important ramifications."* Press reports at the time supported the Government's stance. That if the High Court Judgment stood then the *"Government's pesticide policy would be fundamentally undermined"* and that the policy and approvals system *"might even grind to a halt."*

How corrupt regulators in the EU and the UK re-licensed Roundup for the benefit of the European Glyphosate Task Force

More than 1 million citizens petitioned the European Commission for a glyphosate ban

This petition was launched in January 2017 and signed by 1,070,825 citizens. Commissioner Andriukaitis and Commissioner Timmermans listened to the European Citizens' Initiative on glyphosate and announces more transparency in scientific assessments.⁵⁰ However, they still renewed the license for 5 years.

Glyphosate and AMPA: widespread persistence in topsoils in Europe⁵¹

Press Release: "A new research study by the European Commission's Joint Research Centre, the Dutch University of Wageningen and Rikilt laboratories, reveals that among 317 EU soil samples of arable land, 42% contained AMPA, the most toxic metabolite of glyphosate, while glyphosate was found in 21% of the soils; 18% of the samples had both. **This was contrary to the assertions of the manufacturers.**⁵² The study was conducted in six crop systems along 11 EU member states comprising soils under different geographical and climatic conditions. Denmark, **the UK** and Portugal are the worst in this spectrum, with the highest detection frequency, while Italy and Greece seem to be the ones using less glyphosate on their crops. **However, and most notably, these 2 molecules could be found in every tested member state. All tested crops presented glyphosate and AMPA residues.** By far, the worst case was that of Portuguese vineyards, while no crops exhibited patterns of reduced reliance on glyphosate compared to others." (Denmark's government banned Roundup in 2001 because it was found in groundwater. But the right-wing government later unbanned it at the request of some farmers who had come to rely on it.)

Why did the European Commission relicense glyphosate when their own Research Centre had produced these figures? European Legislation was set up for the benefit of the agrochemical industry: exchanges between Monsanto Europe and the Health Commissioner confirm this

Monsanto Europe replied to Health Commissioner Andriukaitis on 04/04/2016 to say that the 24 Glyphosate Task Force GTF members were prepared to grant very limited access to the data.⁵³ From this very revealing letter we learn that the current EU legislation is set up to *"protect intellectual property and confidential information from public disclosure...All confidential data ...shall be deleted or redacted (Regulation 1107/2009, Article 63)."* Much of the industry data submitted to the German Rapporteur Member State was redacted.

⁵⁰ http://europa.eu/rapid/press-release_IP-17-5191_en.htm

⁵¹ <http://www.pan-europe.info/press-releases/2017/10/press-release-new-study-glyphosate-persists-and-european-top-soils-are>

⁵² <http://www.glyphosate.eu/environmental-fate-and-behaviour-glyphosate>

⁵³ https://ec.europa.eu/commission/sites/cwt/files/letter_1.pdf

The European Parliament has no legislative function in the approvals process

According to the European Glyphosate Task Force, the renewal process is legislated for by means of a Commission Regulation (No. 1107/2009). Therefore, the European Parliament has no legislative function within the framework of the approval process.⁵⁴ However, Baum Hedlund sent the *Monsanto Papers* to four members of the European Parliament after their request for advice.⁵⁵

Successive Heads of Pesticide Unit, Health and Consumers Directorate General (DG Sante) European Commission appear to have no appropriate specialist knowledge

Michael Flüh admitted to being a non-scientist (in a video) and Klaus Berend who replaced him after Michael Flüh resigned is an expert in the REACH specifications of plastics in aviation.

(REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances): The Biocidal Product Regulation (BPR, Regulation (EU) 528/2012) concerns the placing on the market and use of biocidal products, which are used to protect humans, animals, materials or articles against harmful organisms, like pests or bacteria, by the action of the active substances contained in the biocidal product.)

European Commission decision on middle management staff⁵⁶

Page 2 (2) Middle managers should not only have a *very good knowledge of their subject areas*, they should also be outstanding in managing work and people.

Page 5 Article 4 The role of heads of unit is regarded as particularly important. They shall possess specific management (i.e. work organisation, people management and, where relevant, financial resources management) competencies and *an appropriate degree of specialist knowledge and technical expertise.*

Pesticides and public health: an analysis of the regulatory approach to assessing the carcinogenicity of glyphosate in the European Union⁵⁷

Abstract: The present paper scrutinises the European authorities' assessment of the carcinogenic hazard posed by glyphosate based on Regulation (EC) 1272/2008. We use the authorities' own criteria as a benchmark to analyse their weight of evidence (WoE) approach. Therefore, our analysis goes beyond the comparison of the assessments made by the European Food Safety Authority and the International Agency for Research on Cancer published by others. We show that not classifying glyphosate as a carcinogen by the European authorities, including the European Chemicals Agency, appears to be not consistent with, and in some instances, a direct violation of the applicable guidance and guideline documents. In particular, we criticise an arbitrary attenuation by the authorities of the power of statistical analyses; their disregard of existing dose–response relationships; their unjustified claim that the doses used in the mouse carcinogenicity studies were too high and their contention that the carcinogenic effects were not reproducible by focusing on quantitative and neglecting qualitative reproducibility. Further aspects incorrectly used were historical control data, multisite responses and progression of lesions to malignancy. Contrary to the authorities' evaluations, proper application of statistical methods and WoE criteria inevitably leads to the conclusion that glyphosate is 'probably carcinogenic' (corresponding to category 1B in the European Union).

⁵⁴ http://www.glyphosate.eu/system/files/sidebox-files/renewal_process_for_glyphosate_faqs_0.pdf

⁵⁵ <https://usrtk.org/wp-content/uploads/2017/08/Exhibit-Letter-from-plaintiffs-attorneys-to-European-Parliament.pdf>

⁵⁶ https://ec.europa.eu/info/sites/info/files/european-commission-decision-on-middle-management-staff_3288_c_2016_en.pdf

⁵⁷

https://www.academia.edu/37537868/Pesticides_and_public_health_an_analysis_of_the_regulatory_approach_to_assessing_the_carcinogenicity_of_glyphosate_in_the_European_Union

NFU and Defra plan for GM Roundup Ready Crops after Brexit, despite ADAS reporting weed resistance to Roundup

Georgina Downs writes on the Government's Agriculture Bill after Brexit⁵⁸

Extracts: *"The long-awaited Agriculture Bill finally made its first appearance this week when it was introduced before Parliament. This is the UK Government's plan on what UK farming will look like post Brexit. There is no reference to the protection of human health or public health in the Agriculture Bill as regards to farmers, the main users of pesticides - despite the DEFRA Consultation that preceded the publication of the Agriculture Bill being called Health and Harmony.*

The widespread use of pesticides and other toxic chemicals in our existing farming system appears to be the Government's 'elephant in the room' because of DEFRA's reluctance to mention it - let alone focus on it. Therefore, there is no recognition or even any specific reference in the Agriculture Bill - or Mr Gove's statements - to the continued risks associated with the continued use of pesticides and other agrochemicals on crop fields across the UK. Latest Government statistics show that regarding just pesticides alone (i.e. not including chemical fertilisers and all the other agrochemicals used in conventional farming), in 2014 the total area treated with pesticides on agricultural and horticultural crops was 80,107,993 hectares, with the total weight applied 17,757,242 kg."

Ms Downs has appealed to Theresa May to stop multiple pesticides from being sprayed on rural residents, but she has been silent on the matter.

The UK Farming Minister was interviewed by Arthur Neslen on 30/05/2016 about Brexit

He said: *"The birds and habitats directives would go. But the directives' framework is so rigid that it is spirit-crushing."* On **pesticides**, he said *"the EU's precautionary principle needed to be reformed in favour of a US-style risk-based approach, allowing faster authorisation."*

Defra is quoted as saying that after Brexit: *"The most promising crops suitable for introducing to England would be Roundup Ready GA21 glyphosate tolerant crops, which synergises well with herbicides already widely used in the UK. Empowering farmers to use the cutting-edge crop science innovations that are available is certainly one opportunity presented by shifting the responsibility for licencing domestically post-Brexit. Although the blanket spraying of herbicides like Roundup present challenges regarding their impact on the environment and animals, the more obvious solution would be to regulate the technique, not the actual product because it would make that possible."*⁵⁹

The alleged 'first' glyphosate-resistant weed in Britain has just been reported by scientists from ADAS, the body that endorsed Monsanto's suggestion of spraying pre-harvest glyphosate in 1980 *Poverty brome (Bromus sterilis L.) [sterile or barren brome, syn. Anisantha sterilis (L.) Nevski] is a problematic UK arable weed. There are currently no confirmed cases of glyphosate resistance in any weed species in the United Kingdom or in B. sterilis worldwide... This, coupled with increasing glyphosate use, highlights the need for increased vigilance and monitoring for glyphosate resistance in the United Kingdom.*⁶⁰

Has anyone looked at Black Grass, (Alopecurus agrestis L.)? Herbicide-resistant black grass, first seen in 1982 (only two years after farmers started spraying glyphosate pre-harvest) and is now found on 16,000 farms in 34 counties. This was the reason Guy Gagen gave for an increase in Roundup sprayed between 2012 and 2014. Ben Webster of the Times reported: *"Farmers have sharply increased their use of a weedkiller that has been classified as "probably carcinogenic to humans".*⁶¹

⁵⁸ <https://theecologist.org/2018/sep/14/new-uk-agriculture-bill-triumph-or-travesty>

⁵⁹ <https://www.politicshome.com/news/uk/foreign-affairs/brexit/opinion/dods-monitoring/95900/future-food-will-defra-embrace-gmos>

⁶⁰ <https://www.cambridge.org/core/journals/weed-science/article/first-cases-of-evolving-glyphosate-resistance-in-uk-poverty-brome-bromus-sterilis-populations/2EC536244FC205586290731EF1BE4593>

⁶¹ <https://www.thetimes.co.uk/article/farmers-using-more-carcinogenic-weed-killer-76bl8lw95t5>

More than 1,700 tonnes of glyphosate were sprayed on crops last year, up a third on 2012, according to the Department for Environment, Food and Rural Affairs (Defra). The total area sprayed with the weedkiller grew by almost 500,000 hectares to 2.1 million hectares, an area the size of Wales.”

Guy Gagen said: “No farmer would be wanting to put a chemical on a crop when he doesn’t need to.” He added that spraying wheat could result in traces of glyphosate ending up in bread sold in supermarkets but the amount was well below the maximum residue level set by the EU.

A Defra spokesman said: “There are extensive regulations in place so that people and the environment are protected from pesticides. The approval of glyphosate for use across Europe is being reviewed by the EU Commission.”

The Soil Association, the organic food body, called last month on supermarkets to take bread containing glyphosate residue off shelves. It said the maximum residue level for glyphosate in wheat of 10 mg per kg had been set well before the finding that the herbicide was probably carcinogenic.

Covert footage reveals cruelty of badger culls expanded in an attempt to ‘eradicate TB in cattle’. Absolutely no scientific justification, merely an expensive gesture to please farmers

Trapped in a cage and shot at close range, the badger takes almost a minute to die.⁶² Covert footage published online by the *Observer*, the first to be shared publicly, shows the main method of dispatching Britain’s largest indigenous carnivore as part of a controversial cull now **being expanded by the environment secretary, Michael Gove**, which farmers insist is vital to curb the spread of TB in cattle. Taken in Cumbria by the Hunt Investigation Team, it has been released by animal rights groups for maximum political effect ahead of the Conservative party conference, as Gove considers a key report on the government’s TB eradication strategy. Animal rights activists said the footage raised questions about how the cull works. “*The brutal slaughter of tens of thousands of badgers in the biggest destruction of a protected species in living memory is a national disgrace,*” said Dominic Dyer, CEO of the Badger Trust. “*This war on wildlife has been carried out in secrecy by poorly paid contractors with no independent monitoring or concern for animal welfare or public safety.*” Gove recently approved 11 new badger cull licences in England in 2018, bringing the total in operation to 32. A review of the government’s 25-year bovine TB strategy carried out by Sir Charles Godfray, a population biologist and fellow of the Royal Society, was delivered to Gove last week and will be published shortly.

Field studies on Danish Dairy cows fed GM soya

Studies in Danish Dairy cattle fed GM soya.⁶³ Farm animals such as high yielding dairy cows ingest concentrated feeds like soy, corn, and other grains contaminated with the herbicide glyphosate. This contamination is especially high in genetically modified crops (GMO) with resistance to glyphosate or in those crops treated pre-harvest with glyphosate to desiccate grain or kill late-emerging weeds. This is the first report of glyphosate in the urine of dairy cows chronically contaminated with glyphosate in their feed. The cows had:

- Glyphosate in the urine
- Blood parameter indicative of cytotoxicity (Increased alkaline phosphatase (AP), glutamate dehydrogenase (GLDH), glutamate oxaloacetate transaminase (GOT), creatinine kinase (CK)
- Signs of nephrotoxicity (raised urea and creatine)
- Increased serum cholesterol (the first statin, simvastatin, was trialled by Merck in 1994).
- Trace elements: very low levels of manganese and cobalt.

Birth defects in piglets in Denmark correlated with glyphosate residues in organs

Detection of Glyphosate in 38 malformed Piglets⁶⁴

⁶² <https://www.theguardian.com/environment/2018/sep/30/covert-footage-reveals-cruelty-of-badger-culls>

⁶³ <http://dx.doi.org/10.4172/2161-0525.1000186>

⁶⁴ <https://www.omicsonline.org/open-access/detection-of-glyphosate-in-malformed-piglets-2161-0525.1000230.pdf>

Glyphosate residues were found in different organs and tissues (lungs, liver, kidney, brain, gut wall and heart) of malformed euthanized one-day-old Danish piglets (N= 38). They were tested using an enzyme-linked immunosorbent assay (ELISA).

- The highest concentrations were seen in the lungs (Range 0.4-80 µg/ml) and hearts (Range 0.15-80 µg/ml)
- The lowest concentrations were detected in muscles (4.4- 6.4 µg/g).

The authors gave an overview of reports of malformations in children of families living a few metres from where this herbicide was sprayed. The risk of malformation in human embryos is very high when their mothers are contaminated at 2 to 8 weeks of pregnancy.

Diseases in cattle in Germany shown to be related to glyphosate residues in feed

Krüger *et al.* have studied the damaging effects of glyphosate on the beneficial gut biota of poultry.⁶⁵ In another paper: *Visceral botulism at dairy farms in Schleswig Holstein, Germany* the authors show that the farmers who look after sick cattle with botulism often have botulism too. *C. botulinum* occurs in cows' and farmers' faeces and in cattle feeds.⁶⁶ The researchers show that the humans are most likely contracting their infections, not from the cattle but from the feeds, because the same type of botulinum is present in both humans and feeds, but the type of botulinum in the cattle is different. There is now a strong probability that glyphosate residues in animal feeds result in botulism in the cattle and also in related ailments in poultry.

In a mega dairy in Wales 160 cows died from an outbreak of botulism in May 2014.⁶⁷ "About 20 incidents of botulism in the UK are recorded each year," the Agency added, "but because botulism is **not** a notifiable disease, this figure is unlikely to be truly representative of the disease's incidence.

The creator of GMO potatoes reveals the dangerous truth⁶⁸

'Pandora's Potatoes: The Worst GMOs'

The Ex-Director of J.R. Simplot and team leader at Monsanto, Caius Rommens, has revealed the hidden dangers of the GMO potatoes he created, in a wide ranging interview for Sustainable Pulse, on the same day that his book 'Pandora's Potatoes: The Worst GMOs' was released [on Amazon](#). Here are some extracts from the interview.

How many years did you spend working on creating GM potatoes? Was this all lab-based work or did you get out to see the farms that were growing the potatoes?

"During my 26 years as a genetic engineer, I created hundreds of thousands of different GM potatoes at a direct cost of about \$50 million. I started my work at universities in Amsterdam and Berkeley, continued at Monsanto, and then worked for many years at J. R. Simplot Company, which is one of the largest potato processors in the world. I had my potatoes tested in greenhouses or the field, but I rarely left the laboratory to visit the farms or experimental stations. Indeed, I believed that my theoretical knowledge about potatoes was sufficient to improve potatoes. This was one of my biggest mistakes."

Why have you decided to reveal information about the failings of GM potatoes after spending many years creating them?

⁶⁵ <http://www.ncbi.nlm.nih.gov/pubmed/23224412>

⁶⁶ <http://www.ncbi.nlm.nih.gov/pubmed/22200452>

⁶⁷ <https://www.fwi.co.uk/news/rare-botulism-outbreak-kills-160-dairy-cows>

⁶⁸ https://sustainablepulse.com/2018/10/09/the-creator-of-gmo-potatoes-reveals-the-dangerous-truth-exclusive-interview/#.W70H-i97E_V

“I dedicated many years of my life to the creation of GMO potatoes, and I initially believed that my potatoes were perfect but then I began to doubt. It again took me many years to take a step back from my work, reconsider it, and discover the mistakes. Looking back at myself and my colleagues, I believe now that we were all brainwashed; that we all brainwashed ourselves. We believed that the essence of life was a dead molecule, DNA, and that we could improve life by changing this molecule in the lab. We also assumed that theoretical knowledge was all we needed to succeed, and that a single genetic change would always have one intentional effect only.

We were supposed to understand DNA and to make valuable modifications, but the fact of the matter was that we knew as little about DNA as the average American knows about the Sanskrit version of the Bhagavad Gita. We just knew enough to be dangerous, especially when combined with our bias and narrowmindedness. We focused on short-term benefits (in the laboratory) without considering the long-term deficits (in the field). It was the same kind of thinking that produced DDT, PCBs, Agent Orange, recombinant bovine growth hormone, and so on. I believe that it is important for people to understand how little genetic engineers know, how biased they are, and how wrong they can be. My story is just an example.”

Have the GM potatoes you helped create been approved by the FDA and EPA in the U.S. or indeed elsewhere in the world?

“It is amazing that the USDA and FDA approved the GM potatoes by only evaluating our own data. How can the regulatory agencies assume there is no bias? When I was at J.R. Simplot, I truly believed that my GM potatoes were perfect, just like a parent believes his or her children are perfect. I was biased and all genetic engineers are biased. It is not just an emotional bias. We need the GM crops to be approved. There is a tremendous amount of pressure to succeed, to justify our existence by developing modifications that create hundreds of millions of dollars in value. We test our GM crops to confirm their safety, not to question their safety.

The regulatory petitions for deregulation are full with meaningless data but hardly include any attempts to reveal the unintended effects. For instance, the petitions describe the insertion site of the transgene, but they don’t mention the numerous random mutations that occurred during the tissue culture manipulations. And the petitions provide data on compounds that are safe and don’t matter, such as the regular amino acids and sugars, but hardly give any measurements on the levels of potential toxins or allergens.

The Canadian and Japanese agencies approved our GMO potatoes as well, and approvals are currently considered in China, South Korea, Taiwan, Malaysia, Singapore, Mexico, and the Philippines.”

Is it possible for GM potatoes to cause gene-silencing in other potatoes or pollinating insects such as bees?

“The problem with certain insects, including bees, is that they cannot degrade the small double-stranded RNAs that cause gene silencing. These double-stranded RNAs were intended to silence several potato genes in tubers, but they are likely to be expressed in pollen as well. So, when the pollen is consumed by bees, the double stranded RNAs in this pollen may silence bee genes that share inadvertent homology.”

Your new book Pandora’s Potatoes, which is available to the public for the first time this week, includes many points as to why the GM potatoes you helped create should not be grown by farmers or eaten by the public. What would you like to say to the FDA and EPA?

“The main problem about the current process for deregulation of GMO crops is that it is based on an evaluation of data provided by the developers of GMO crops. There is a conflict of interest. I propose that the safety of GMO crops is assessed by an independent group of scientists trained at identifying unintended effects.”

From Thatcher onwards, the British Government, the Royal Society and the UK Media have sold the people to Corporations

From Margaret Thatcher and Tony Blair, through to David Cameron and now Theresa May, successive Prime Ministers have allowed Big Corporations to run Britain; the Bankers, the Agrochemical Industry and their parent Pharmaceutical Companies, the Vaccines Industry, Mega Supermarkets, Sugar Industry, Media Moghuls, the Betting Industry, Alcohol Industry, Private National Health Service, Private Finance Initiatives, Oil Industry, the Arms' Industry, the Fracking Industry and the electronic giants. As well as chemicals, adults and children are brainwashed by a diet of social media, sex, violence, gambling, celebrities, drugs, vaccines, genetically-designed babies, artificial intelligence and robots ...mostly for the benefit of Global Corporations.

Tony Blair, Monsanto and the Royal Society combined to discredit Dr Arpad Pusztai when he found that rats fed GM potatoes had complications; his lab was closed down

Another scandal involved Tony Blair and the Royal Society.⁶⁹ There are many credible witnesses. On 10 August 1998 in a Granada 'World in Action' broadcast⁷⁰ Dr Arpad Pusztai explained his research that showed that rats fed with genetically modified potatoes had suffered immune damage. He raised questions about the safety of GM food in the human diet on the basis of the study. The news flashed around the world. Professor Robert Orskov OBE who had worked at the Rowett Institute for 33 years was told that phone calls went from Monsanto, the American firm which produces 90% of the world's GM food, to Clinton and then to Blair. "*Clinton rang Blair and Blair rang James*" (Professor James, Director of the Rowett Institute). "*There is no doubt he was pushed by Blair to do something. It was damaging the relationship between the USA and the UK, because it was going to be a huge blow for Monsanto.*" Dr Pusztai lost his job and his Laboratory in the Rowett Institute was closed down. What Prof Orskov probably did not know was that ex-Monsanto employees dominate the White House.

The Royal Society supports GM crops but refuses to have a rational debate about them

Dr Brian John of GM-Free-Cymru wrote an Open Letter to the President of the Royal Society, Sir Paul Nurse on 26/01/2011.⁷¹ It was in response to a BBC Horizon programme in which Sir Paul examined some of the reasons why the public at large is profoundly sceptical about science and scientists with regard to global warming and GM. (Sir Paul Nurse had been sent by the Rockefeller Foundation to persuade the British public to accept GM crops.) Dr John said: "*For more than a decade now, scientists working in the GM field have mounted vicious personal attacks (sometimes politically rather than scientifically motivated) upon serious scientists who have had the temerity to discover 'uncomfortable things about GM crops and foods.'* This trend started with the vitriolic treatment meted out (with the Royal Society in the vanguard) on Arpad Pusztai and Stanley Ewen a decade ago, and continued with the crucifixion of Ignacio Chapela and David Quist, Angelika Hilbeck, Maewan Ho, Judy Carman, Gilles-Eric Séralini, Andrés Carrasco, Manuela Malatesta, Christian Velot, Irina Ermakova and many others... You will be aware that there has never been a single piece of epidemiological research to back up the claims that GM foods are entirely safe to eat. Since the earliest days of the GM enterprise, the industry has set itself against such research, and governments, regulators and august bodies like the Royal Society have connived in this cunning little plan, allowing GM advocates like Julian Little (Bayer) to trot out this sort of nonsense: 'two trillion meals containing GM ingredients have been consumed with no adverse health effects.' As we all know, there are abundant animal feeding studies that show that GM components in the diet lead to physiological changes and cell damage. The American Academy of Environmental Medicine drew

⁶⁹ <http://www.psrast.org/pusztblair.htm>

⁷⁰ <http://news.bbc.co.uk/1/hi/health/149882.stm>

⁷¹ http://www.gmfreecymru.org.uk/open_letters/Open_letter26Jan2011.html

attention to studies that indicate "serious health risks associated with GM food consumption including infertility, immune dysregulation, accelerated aging, dysregulation of genes associated with cholesterol synthesis, insulin regulation, cell signalling, and protein formation, and changes in the liver, kidney, spleen and gastrointestinal system". They concluded that: "There is more than a casual association between GM foods and adverse health effects. There is causation ..."

Genetically Engineered Foods: The Biggest Fraud in the History of Science. Governments and leading scientific institutions have systematically misrepresented the facts about GMOs and the scientific research that casts doubt on their safety

On 4 March 2015 the Organisation Beyond GM facilitated the Press Release⁷² of American public interest attorney Steven Druker's acclaimed new book, *Altered Genes, Twisted Truth: How the Venture to Genetically Engineer Our Food Has Subverted Science, Corrupted Government and Systematically Deceived the Public.*

Steven Druker initiated a lawsuit against the US Food and Drug Administration (FDA) that forced it to open its files on GM foods

Those files revealed that GM foods first achieved commercialisation in 1992 only because the FDA:

- Covered up the extensive warnings of its own scientists about their dangers
- Lied about the facts
- And then violated federal food safety law by permitting these foods to be marketed without having been proven safe through standard testing

He was accompanied by Dame Jane Goodall, the renowned primate expert, who has condemned 'deluded' politicians for pushing 'Frankenstein Food.' *The highly respected academic has endorsed a new book, which argues the companies responsible for developing genetically modified farming and food have twisted the evidence to minimise the dangers.*⁷³

In her foreword to the book she says: "Druker has, without doubt, written one of the most important books of the last 50 years; and I shall urge everyone I know, who cares about life on earth, and the future of their children, and children's children, to read it. It will go a long way toward dispelling the confusion and delusion that has been created regarding the genetic engineering process and the foods it creates. To me, Steven Druker is a hero. He deserves at least a Nobel Prize." The foreword was signed by Jane Goodall, Ph.D. DBE and UN Messenger of Peace.⁷⁴

Druker challenges the UK Royal Society over misleading statements made about GM foods

Open Letter (04/03/2015) to the UK Royal Society can be read here.⁷⁵

Extracts: "Because clarifying the facts about GM foods is crucial for developing an intelligent, science-based policy on the future of agriculture, and because the Royal Society has significantly contributed to the confusion that currently surrounds this issue, it is imperative that remedial action be promptly initiated. This is especially so considering that:

- The European Commission is about to approve substantial regulatory changes in regard to GM crops.
- The UK is seriously considering allowing them to be commercially planted.
- The Society and other proponents of GM foods have inculcated the widespread illusion that there is an overwhelming scientific consensus that the safety of these products has been established through rigorous testing..."

⁷² <http://beyond-gm.org/altered-genes-twisted-truth-media-resources/>

⁷³ <http://www.dailymail.co.uk/news/article-2979645/Senior-academic-condemns-deluded-supporters-GM-food-anti-science-ignoring-evidence-dangers.html>

⁷⁴ http://beyond-gm.org/wp-content/uploads/2015/03/AGTT_FOREWORD.pdf

⁷⁵ http://beyond-gm.org/wp-content/uploads/2015/03/DRUKER_OPEN-LETTER-TO-THE-ROYAL-SOCIETY_Final.pdf

Unless you promptly take these steps, it will demonstrate that your commitment to promoting GM foods is stronger than your commitment to honoring the truth and upholding the integrity of science. FURTHER, whether or not you own up to your irresponsible actions and take the steps specified above, I challenge you to read my book and specifically list any inaccurate statements of fact that you find in it, accompanied by an explanation of why the statement is erroneous and a reference to the evidence that corroborates your assertion."

By June 2015, he still had no reply.

Income inequality since Margaret Thatcher

*"Income inequality has now reached a new maximum and, for the first time in a century, even those just below the richest 1% are beginning to suffer, to see their disposable income drop. When you exclude the top 1%, income inequality within the rest of the population, within the 99%, is now lower than at any time since Margaret Thatcher was prime minister."*⁷⁶

Margaret Thatcher begins the destruction of the Universities

Roger Brown, professor of higher education policy at Liverpool Hope University said Margaret Thatcher's policies were *"the beginning of a long decline"* for universities. *"The cuts in 1981 were a disaster for British higher education – some of worst things that have ever happened to higher education,"* said Professor Brown, a former head of the Higher Education Quality Council, the predecessor to the Quality Assurance Agency. *"She didn't actually have much interest in higher education, though she was upset at [her alma mater] Oxford's failure to give her an honorary degree."*

What the British Government did for London Bankers after the 2008 crash (updated to 2018)

John Rees:⁷⁷ *"Support for the banking sector in France was just 20% of national wealth; in Germany, 25%. Even in the US where the crisis began, it was only 35%. But in the UK, the government pumped money into the banks that was worth nearly 90% of our national wealth" ...The links between the City and Parliament are as strong as ever. Some 68 MPs and Lords have controlling interests or directorships in corporations linked to tax havens. At a time when privatisation of the NHS is being debated, over 75 MPs have business interests directly linked to private pharmaceutical firms...The City is crash-prone debt generator. It is an engine of inequality. It blights the city."*

Ten years after Lehmans, it's as if we've learned nothing from the crash.⁷⁸ Aditya Chakraborty writing on 5 September 2018 confirms the figures underwritten by the British taxpayer after the crash in 2008. *"On the same day in June 2006, Brown and David Cameron both made speeches in London about banking. One Labour, one Tory, yet each addressed the City in the same lovestruck terms. For Cameron, London was "a great UK success story". Brown believed that "London's success" demonstrated the miracles of "light-touch regulation, a competitive tax environment ... open to competition and to new ideas". In Cameron's mouth that became: "Low tax. Less regulation ... Openness. Innovation." They sound like a pair of cockatoos in the same cage. It was almost funny – if you didn't know that, based on IMF figures, the eventual punchline would be that each and every man, woman and child in Britain would underwrite the finance sector to the tune of £19,271 in bailouts, loans and state guarantees."*

Danny Dorling: *"You can see the spreading out to Canary Wharf and so on and the buildings rising up there and the areas very nearby where the people who work in Canary Wharf will not live. But there is also another hidden city, which is towards Mayfair, where all you get to see are brass plaques on*

⁷⁶ <http://www.theguardian.com/education/2014/feb/04/education-system-polarises-people-economic-inequality>

⁷⁷ <http://thepeoplesassembly.org.uk/john-rees-on-the-today-programme-edited-by-pj-harvey/>

⁷⁸ <https://www.theguardian.com/commentisfree/2018/sep/05/ten-years-financial-crash-lehmans-austerity-debt>

the wall, because they don't need to advertise themselves – these are the hedge funds that only operate for the extremely wealthy. The other thing that is very important to say about London – what is so different in London to the rest of Europe – is that London has a couple of thousand bankers who are earning over £1 million a year, whereas the next highest is less than 200 in the whole of Germany.”⁷⁹

Why is Britain Arming Repression?

Mark Curtis in conversation with Professor Neil Cooper on the Today Programme 02/01/2014 Edited by PJ Harvey:⁸⁰ Cooper:⁸¹ *“This summer (2013) the government released information showing that it had 3,000 extant (still existing) arms export licences to countries that the Foreign Office listed as countries of concern in terms of human rights abuses... In 2012, over 7 billion pounds worth of British military-related equipment was exported around the world. All three main political parties strongly support arms exports and none has a policy of banning them to human rights abusers. David Cameron has visited over a dozen countries with arms exports on the agenda.”*

‘Few prime ministers have been as tireless in promoting Britain's arms industry as David Cameron.’⁸² He calls it a key part of the UK's economy, but do the figures really add up?

In this business, in defiance of the past three decades' free-market orthodoxies, the state is pivotal. Accompanying Cameron in India are representatives of a dozen British or partly British-based companies – the industry is clever at blurring such definitions – with defence interests: Rolls-Royce, Serco, BAE, EADS, Thales, Atkins, Cobham, JCB, Strongfield Technologies, MBDA, Ultra Electronics. The British state is also the industry's biggest customer, with our armed forces accounting for four-fifths of its annual sales.’ “Boosting exports is vital for economic growth, and that's why I'm doing all I can to promote British business ... so [it] can thrive in the global race.” said Cameron on the eve of his Oman trip. “Every country in the world has a right to self-defence, and I'm determined to put Britain's first-class defence industry at the forefront of this market, supporting 300,000 jobs across the country.”

Theresa May continues Cameron's selling of arms to repressive regimes

May arrived for trade talks with the Turkish government on 27/01/2017, as Downing Street announced that the two countries had agreed to set up a joint working group to carry out the groundwork for a bilateral deal.⁸³ The Liberal Democrat leader, Tim Farron, criticised the prime minister's decision to seek strong trade links with the Turkish regime. *“As Theresa May seeks trade deals with ever more unsavoury leaders, she ignores the simple point that the most successful countries around the world respect human rights – economies flourish in free societies,”* he said. *“There are tens of thousands of people in Turkish jails without fair trial, who in many cases have committed no crime other than daring to disagree with President Erdoğan. Theresa May should address this as a priority in her meeting today. Yes, the prime minister should seek to promote British trade, but at this time her priority should be to secure a long-term trade deal with our European neighbours by fighting to stay in the single market.”*

May visited Saudi Arabia in April 2017 also to negotiate arms deals⁸⁴

“The UK exported more than £6.5 billion in goods and services to Saudi Arabia in 2015, making it Britain's largest trading partner in the Middle East. Britain has also been one of the biggest suppliers

⁷⁹ The Today Programme edited by PJ Harvey. Professor Danny Dorling in conversation with John Rees.

⁸⁰ <http://markcurtis.wordpress.com/2014/01/02/arming-repression-today-programme-2-january-2014/>

⁸¹ Prof Neil Cooper: Expert on the Arms Trade; Peace Studies; Bradford University. Today Programme edited by PJ Harvey. 2 January 2014

⁸² <http://www.theguardian.com/world/2013/feb/18/britains-arms-trade-making-killing?INTCMP=SRCH>

⁸³ <https://www.theguardian.com/world/2017/jan/27/theresa-may-recep-erdogan-turkey-human-rights-not-on-agenda>

⁸⁴ <https://www.presstv.com/Detail/2017/04/04/516708/May-to-tap-Saudi-potential-to-boost-UK-economy>

of weapons to Riyadh for 40 years, an issue that has come under close scrutiny because of the war in Yemen, which has killed more than 12,000 people, half of them civilians. Saudi Arabia launched the offensive against Yemen in March 2015 in an attempt to bring back the former government to power and undermine the Houthi Ansarullah movement."

Jeremy Corbyn, the leader of Britain's main opposition Labour Party, demanded that May raise concerns about "the dictatorial Saudi monarchy's shocking human rights record." Corbyn also called on May's government to immediately halt arms sales to Saudi Arabia and to push for a ceasefire in Yemen. "Unless the prime minister challenges the Saudi regime over its abuses this week, it will be clear she is ready to sacrifice human rights and security on the altar of the arms trade," he said in a statement.

Evidence that the British people and people around the world are being poisoned by pesticides in their food and in the air

British women live shorter lives than most other Europeans and nearly 20 years in poor health⁸⁵
Spanish women live the longest, with UK longevity ranked 17th out of 28 EU nations, according to Public Health England's annual health profile

*"There is no reason why we shouldn't be as healthy as anywhere in Europe," said Prof John Newton, director of health improvement at PHE. ⁸⁶ "Many of the causes of chronic, long-term diseases in the UK which shorten lives are preventable. **Obesity** is causing a big surge in the numbers of people developing type 2 diabetes. The report shows the numbers with diabetes are expected to rise swiftly, from just under four million last year to nearly five million in 2035. Along with alcohol, obesity is also one of the factors behind the rise in breast cancer. Apart from the human cost, the bill for the NHS will be huge... The list of the most common site-specific cancers remained unchanged from 2015 in both sexes. Lung cancer, colorectal and anal cancer, and leukaemia and lymphomas were all in the top ten leading causes of death in 2016... Prostate cancer and breast cancer remained amongst the top ten leading causes of death for males and females respectively, both ranked seventh, the same as in 2015. Lung cancer deaths remained the third most common cause of death for males and sixth most common for females in 2016. There has also been an increase in the death rate from lung cancer (8%), kidney disease and other diseases of the urinary system (38%) and chronic lower respiratory disease (18%). When deaths from all cancers are grouped together, cancer accounted for 25.6% of all deaths in females and 30.3% of all deaths in males in 2016. This would make it the leading cause, in 2016, for both sexes. The leading cause of death for women is dementia and Alzheimer's disease, responsible for 15.8% of deaths, with heart disease second at 8.3%. There has been an increase in the death rate from dementia and Alzheimer's of more than 60% and deaths from liver disease have increased by 12%.*

Women in 2014-16 were spending nearly 20 years of their life in poor health (19.3 years), while men spent just over 16 years in poor health, according to data from the Office for National Statistics included in the report. The leading cause of poor health, responsible for more than 22% of the pain and suffering, is low back and neck pain, which can be caused by a number of things, including injury and rheumatoid arthritis. After that come skin diseases such as acne and psoriasis, says the report. Third for men is sight and hearing loss, while for women it is migraine. Fourth for both is depressive disorders. Long-term conditions such as diabetes, high blood pressure and cancers underlie some of these problems."

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<http://click.mail.theguardian.com/?qs=bd4bb2980cde506285bbd7433f46e1dcb58fad37ae94d5a5d26dba313aef8ec8b4af965a3c4068bc7770cb3208949b39>

⁸⁶ <https://www.gov.uk/government/publications/health-profile-for-england-2018/chapter-2-trends-in-mortality>

This is because Roundup weedkiller is in our food and is present in every organ of the body

Monsanto's secret sealed documents (see pages 23/24) obtained under FOI from the US EPA by Anthony Samsel showed that Ridley and Mirly (1988) (for Monsanto) found bioaccumulation of ¹⁴C-labelled glyphosate in Sprague Dawley rat tissues. Residues were present in bone, marrow, blood, connective tissue, cartilage and glands including the thyroid, testes and ovaries, as well as major organs, including the heart, liver, lungs, kidneys, spleen and stomach.

UK cancer survival rates trail behind those of other European countries⁸⁷

Cancer survival rates in the UK are still lagging more than two decades behind those achieved in many European countries, according to new analysis by campaigners on 25th March 2015. The Concord-2 global study looked at survival rates in 67 countries for patients diagnosed with lung, breast, colon and stomach cancers in 1995 to 1999, compared with levels in 2005 to 2009.

Increasing incidence of cancer in children in Europe and competing risks⁸⁸

Extracts from the paper: "First, cancer incidence in children aged 0–14 years has gradually increased over the 1991–2010 period. Second, for all five cancer categories investigated, incidence increases were similar in all four regions. Another contrast across European regions concerns the use of pesticides in agriculture. In 2014, the quantities of pesticide sales per capita were about three times greater in Spain, Italy, and France than in Sweden or the UK. If increasing cancer incidence trends were due to pesticides, dissimilarities in incidence trends for leukaemia and lymphoma would be expected between European regions, which was not the case."

The other explanation is that everyone in Europe is eating the same food with weed killer in it.

The impact of exposure to air pollution in China on cognitive performance: what is in the air?⁸⁹

"Utilizing variations in transitory and cumulative air pollution exposures for the same individuals over time in China, we provide evidence that polluted air may impede cognitive ability as people become older, especially for less educated men. The damage on the aging brain by air pollution likely imposes substantial health and economic costs, considering that cognitive functioning is critical for the elderly for both running daily errands and making high-stake decisions. The damage on the aging brain by air pollution likely imposes substantial health and economic costs, considering that cognitive functioning is critical for the elderly for both running daily errands and making high-stake decisions."

China is the top manufacturer of Glyphosate-based herbicides & the main importer of GMO soy

The China Development Strategy Research Society Committee of Cultural Strategy organized a conference in Beijing, 25/26 July 2014. Food Safety and Sustainable Agriculture Forum to discuss the global harm caused by GMOs and glyphosate-based herbicides. More than 300 people from 13 countries and 5 continents attended. Genetic researchers, university professors, medical doctors, veterinarians, livestock farmers, arable farmers, agricultural consultants, mothers, NGO founders and leaders and social activists from China, Taiwan, U.S.A, Russia, U.K., France, Denmark, Germany, Australia, New Zealand, Argentina, Brazil and Peru. The main problems amongst Chinese workers were Parkinson's Disease, autism and infertility. The Beijing Declaration was signed on 26 July 2014. Translated from the Chinese, it ends: "Mankind has no retreat confronting the threats brought about by the overall proliferation of GM products. Let us take up the holy responsibility and take joint action to protect the health and survival of the human race!"⁹⁰

⁸⁷ <http://www.theguardian.com/society/2015/mar/24/uk-cancer-survival-rates-trail-10-years-behind-those-in-european-countries>

⁸⁸ [https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(18\)30498-4/fulltext?dgcid=raven_jbs_etoc_email](https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(18)30498-4/fulltext?dgcid=raven_jbs_etoc_email)

⁸⁹ <http://www.pnas.org/content/early/2018/08/21/1809474115>

⁹⁰ <https://sustainablepulse.com/2014/08/09/chinese-international-experts-slam-gmos-glyphosate-beijing-conference/#.W4hHjC3Mx0s>

Pesticide drift is the aerial movement and unintentional deposit of pesticide outside the target area:⁹¹ **it results in heavy contamination of people and the environment**

*“There are two forms of pesticide drift. **Particle drift** is the movement of pesticide droplets or solid particles outside the area being treated. Coarser droplets move short distances and fall close to the point of release. Finer particles (i.e. less than 200 microns) can remain suspended in air currents for long periods of time and can be carried far outside of the target area. For example, a 100-micron droplet takes 11 seconds to fall three metres in still air, and will drift more than 20 metres in an 8 km/h wind. **Vapour drift** is the movement of pesticide vapours outside the area being treated. Vapour drift is invisible and can have a considerable impact. Vapours are created when spray droplets evaporate both at the time of application and for some time after the spray has dried on plant or soil surfaces. The potential for vapour drift is more a product of the volatility of the active ingredient, the formulation (e.g. esters) and environmental conditions (e.g. hot and dry) than the equipment used.”* Glyphosate is an endocrine and nervous system disruptor (ENDs) acts at extremely low levels, of the order of parts per trillion (ppt).⁹²

Dicamba: *“Chemical giants Monsanto Company and BASF Corp. have knowingly manufactured a defective and very volatile herbicide dicamba that has damaged soybeans and other crops not genetically modified to withstand it, forcing the state to ban the herbicide and causing farmers substantial harm”* according to a proposed class action filed 21/07/2017 in Arkansas state court.⁹³

Birth defects and GMOs in Hawaii: Pesticides in paradise⁹⁴

Carla Nelson, Californian pediatrician says that in Waimea, there have been at least nine babies born with congenital cardiac malformations in five years; that’s more than 10 times the national rate, according to analysis by local **doctors**. They find themselves in the eye of a storm swirling for the past three years around the Hawaiian archipelago over whether a major cash crop on four of the six main islands, corn that’s been genetically modified to resist pesticides, is a source of prosperity, as the companies claim – or of birth defects and illnesses, as the doctors and many others suspect.

Summary of Center for Food Safety Pesticide Report for Hawaii⁹⁵

From 2007-2012 on Kauai, DuPont-Pioneer alone applied 90 different pesticide formulations representing 63 active ingredients on 2/3 of the days each year, with on average 8.3 to 16 applications per application day in various years of this period (4.3). Pesticide drift frequently sickens Hawai’i’s schoolchildren, triggering nausea, vomiting, dizziness and difficulty breathing, among other symptoms, and in some cases necessitating decontamination showers, school evacuations and hospitalization. Children and adults in Waimea, Kaua’i, downwind of DuPont-Pioneer fields, have been particularly hard hit by pesticide drift and “fugitive dust;” Kaua’i physicians report “almost daily” respiratory complaints, as well as nose bleeds and dermatitis; and they suspect pesticides as a possible cause of high cancer and birth defect rates. Hawai’i’s lack of a pesticide poisoning surveillance system, as found in 11 other states, means that pesticide drift is likely far more common than realized. Farmworkers and children are at greatest risk from pesticides, due to high exposure and greater sensitivity, respectively. Fetuses (via maternal exposure) are the most vulnerable. In a major review of the medical literature, the American Academy of Pediatrics found strong evidence linking pesticide exposure of kids to childhood cancers, neurobehavioral and cognitive deficits, adverse birth outcomes, and asthma. Many of the implicated pesticides (e.g. chlorpyrifos, atrazine) are heavily used in Hawai’i (6.2). Adults exposed to pesticides have higher risk of various cancers, Parkinson’s disease, depression, and reproductive problems, such as low sperm counts

⁹¹ <http://www.omafra.gov.on.ca/english/crops/facts/11-001.htm>

⁹² <http://www.amsi.ge/jbpc/31515/15-3-abs-3.htm>

⁹³ <https://www.law360.com/amp/articles/946817>

⁹⁴ <http://www.theguardian.com/us-news/2015/aug/23/hawaii-birth-defects-pesticides-gmo>

⁹⁵ http://www.centerforfoodsafety.org/files/pesticidereportfull_86476.pdf

(6.1). Studies suggest that even one-time (acute) pesticide poisoning episodes can sometimes have long-term health impacts (6.4).

The Countess of Mar chaired a meeting of the All-Party Parliamentary Group (APPG) on Agroecology in the Houses of Parliament in London on June 18, 2014⁹⁶

Four experts discuss the harm caused by the world's most popular herbicide – Roundup®. The first expert, Dr Don Huber, described the epidemic of diseases in the US that have increased between 1995 and 2011 and are linked to glyphosate: the incidence of the same diseases has increased in the UK over that time. Alzheimer's disease, Dementia, Autism, ADHD Bipolar, Diabetes (Type 2) Multiple sclerosis, Motor-neurone Disease, Obesity, Hypertension, Cataracts & eye diseases, Inflammatory bowel disease, Birth defects, Colitis, Crohn's disease, Hypercholesterolaemia, Allergies, Asthma, Atopic dermatitis, Miscarriage/infertility, Stroke, Renal disease/failure, Liver abnormalities, Coeliac disease, Gluten intolerance, Pancreatic abnormalities, Autoimmune diseases, Arthritis, Non-Hodgkin's Lymphoma, cancers of the liver & bile duct, kidney, bladder, thyroid, pancreas, colon, myeloid leukaemia, bone, myeloma and breast. The meeting was not reported by the UK Media.

Monsanto's sealed secret studies obtained under FOI from the US EPA

Samsel and Seneff wrote paper IV on Glyphosate: Glyphosate, pathways to modern diseases IV: cancer and related pathologies⁹⁷ and concluded that: "*significant evidence of tumours was found during these investigations*". Ridley and Mirly (1988) (for Monsanto) found bioaccumulation of ¹⁴C-labelled glyphosate in Sprague Dawley rat tissues. Residues were present in bone, marrow, blood and glands including the thyroid, testes and ovaries, as well as major organs, including the heart, liver, lungs, kidneys, spleen and stomach (Table 11 Page 127). The eye is included in this list. Table 8 Page 126: Incidence and occurrence of ophthalmic degenerative lens changes by glyphosate. Table 9 Page 126: Data on unilateral and bilateral cataracts (all types) and Y-suture opacities, excluding "prominent Y suture", following glyphosate exposure to rats. Stout & Rueker (1990) commissioned for Monsanto.

A Senior Monsanto scientist had claimed that glyphosate didn't accumulate but was excreted unchanged from the body⁹⁸ and referred back to the glyphosate re-assessment in Europe in 2002. However, Monsanto's secret studies had revealed otherwise.

Anthony Samsel gave Testimony to the California Environmental Protection Agency

"There are no safe levels of glyphosate. Glyphosate is a synthetic amino acid and analogue of our canonical amino acid glycine and participates in plant and animal biology.

One microgram of glyphosate technical acid (N-phosphonylmethyl glycine) contains 3.561 trillion molecules each capable of integrating with a protein altering shape, folding and function. I am a US scientist and hazardous chemicals materials consultant and expert on the subject of Glyphosate. I am one of few people to have received all of the Monsanto's trade secret sealed studies on glyphosate from the US EPA. The federal agency supplied these documents in excess of 100,000 pages to me under the FOIA with special consideration for my research into this chemical. I now have six peer-reviewed papers on the subject of glyphosate and several more papers on the glyphosate in progress, a short list to some of these studies links are appended. The full series of peer-reviewed glyphosate papers may be found at ResearchGate in the author file under Anthony Samsel.

Babies and young children are now stricken with cancers and these have not a chance at a normal life, with many not cured but extinguished. Something is causing these maladies and I suspect N-nitrosamines of glyphosate may be to blame. This is not chronic long-term exposure. I strongly

⁹⁶ <https://sustainablepulse.com/2014/07/02/uk-parliamentary-meeting-brings-dangers-roundup-public-focus/#.W4ahjS3Mx0s>

⁹⁷ <http://www.amsi.ge/jbpc/31515/11SA15R.pdf>

⁹⁸ <https://gmoanswers.com/ask/hi-does-senior-monsanto-scientist-dan-goldstein-still-maintain-if-ingested-glyphosate-excreted>

believe that long-term exposure is not necessary for the induction of cancer.”⁹⁹ He has found glyphosate residues present in vaccines, baby milk formulations, pet foods and rat feeds for experimental purposes.

“I call on the California Environmental Protection Agency to immediately ban the chemical glyphosate based on the latest scientific research conducted here in the USA. Glyphosate has recently been found to integrate with structural proteins as well as animal i.e. human enzymes that include digestive enzymes pepsin, trypsin and lipase as well as lysozyme.”

Samsel found ¹⁴C labelled glyphosate detected in cartilage; is it responsible for degeneration of cartilage and knee arthritis?

Recent anatomical studies of knee arthritis from Harvard show, that when the team factored out the effects of weight and age in the two modern groups, **knee arthritis was still more than twice as common in the group of people who died after 1976**, ‘suggesting other factors are involved’.¹⁰⁰ In England in July 2017 the NHS waiting list for hip replacement (and cataract surgery) exceeded 4 million.

UK Farmers increased their use of Roundup from 226,762 kg in 1990 to 2,240,408 kg in 2016, a 10-fold increase in 16 years. We have residues of weedkiller in UK breakfast cereals aimed at children UK Farmers started spraying crops pre-harvest with Roundup to ‘desiccate’ them in 1980¹⁰¹ as recommended by a scientist from Monsanto and endorsed by ADAS. There are increasing residues of the weed killer, Roundup (and AMPA, the most toxic metabolite) in non-organic diets. In the US the use of Roundup as a desiccant did not start until the late 1990s. The UK obesity levels now exceed those of the US. Children in Wales have been as obese as those in the US since 2014.¹⁰²

Séralini’s team finds heavy metals in chemical formulants of GBH that are in our diet

*Extract: As with other pesticides, 10–20% of GBH consist of chemical formulants. We previously identified these by mass spectrometry and found them to be mainly families of petroleum-based oxidized molecules, such as POEA, and other contaminants. In this work, we also identified by mass spectrometry the heavy metals arsenic, chromium, cobalt, lead and nickel, which are known to be toxic and endocrine disruptors, as contaminants in 22 pesticides, including 11 G- based ones.*¹⁰³

Environmental toxic metal contaminants and risk of cardiovascular disease: systematic review and meta-analysis¹⁰⁴

A meta-analysis published in the BMJ showed: *Exposure to arsenic, lead, cadmium and copper is associated with an increased risk of cardiovascular disease, coronary heart disease and stroke.*

Many young workers in the sugar cane and tea industries have developed Chronic Kidney Disease of unknown origin (CKDu) and died from renal failure following GBH spraying to ripen the crop

Professor Channa Sudath Jayasumana from Rajarata University **announced** earlier this week that a group of farmer organizations, researchers, patients and the families of deceased farmers are set to take Bayer/Monsanto and other glyphosate herbicide manufacturers to the Supreme Court of Sri Lanka over the link between glyphosate-based herbicides and fatal chronic kidney disease of unknown etiology (CKDu), which has killed an estimated 25,000 people in the country.¹⁰⁵ In Sri Lanka

⁹⁹ https://oehha.ca.gov/media/dockets/8594/8767-anthony_samsel/letter_ca_epa_june_32017_draft.pdf

¹⁰⁰ <http://www.sciencemag.org/news/2017/08/knee-arthritis-americans-has-doubled-1940>

¹⁰¹ <http://www.hgca.com/media/185527/is02-pre-harvest-glyphosate-application-to-wheat-and-barley.pdf>

¹⁰² <http://www.wales.nhs.uk/sitesplus/888/news/33512>

¹⁰³ https://www.gmoseralini.org/wp-content/uploads/2018/01/Defarge-et-al_TOXREP_2018.pdf

¹⁰⁴ <https://www.bmj.com/content/362/bmj.k3310>

¹⁰⁵ <https://sustainablepulse.com/2018/08/18/glyphosate-set-for-legal-battle-in-sri-lanka-over-kidney-disease-deaths/#.W46ZiS3Mx0t>

alone CKDu now afflicts over 15% of people of working age in the Northern part of the country; a total of 400,000 patients with an estimated death toll of around 25,000. CKDu affects workers in eleven countries on three continents: Sri Lanka, India, the Pacific coast of Central America, Louisiana, Africa and Vietnam.

Chronic kidney Disease Over a ten-year period from 2005 to 2015, the number of people dying from chronic kidney disease across the world rose by 31.7%. Kidney Research UK estimates that, in the UK alone, some three million lives are at risk from CKD with one million of these cases undiagnosed. This correlates with Séralini's team finding heavy metals contaminating glyphosate-based herbicides. It is also confirmed by his initial study which reported liver and kidney damage. It was republished because of retraction by *Food and Chemical Toxicology*, "After 24 months feeding studies, Males (rats) had liver congestions, necrosis, severe kidney nephropathies and large palpable tumours." ¹⁰⁶

Declines in educational attainment in Britain over recent years; children in the UK have had maximum exposure to pesticides under the British Government's collusion with industry

The UK ratings have declined significantly in the Programme for International Student Assessment. PISA is a worldwide study by the Organisation for Economic Co-operation and Development (OECD) in member and non-member nations of 15-year-old school pupils' scholastic performance on mathematics, science, and reading.¹⁰⁷ PISA was first performed in 2000 and then repeated every three years. It is done with a view to improving education policies and outcomes. It measures problem solving and cognition in daily life.

The UK is falling behind global rivals in international tests taken by 15-year-olds, failing to make the top 20 in mathematics, reading and science (3 December 2013). Although not directly comparable, because there have been different numbers of countries taking part, this marks a sustained decline, with the UK having ranked 4th in the tests taken in 2000.

In 2016 an OECD study showed that in England the young have lower basic skills than their counterparts in Europe.¹⁰⁸ But adults approaching retirement age (55-65-year-olds) in England compare reasonably well with their counterparts in other countries. The study says: "The priority of priorities is therefore to improve the standard of basic schooling in England, improving both average and minimum standards (which are especially weak in England)."

US Scientists sound the alarm about global mass poisoning¹⁰⁹

Editorial: Regulating toxic chemicals for public and environmental health: Lisa Gross and Linda Birnbaum.¹¹⁰

"By the time President Gerald Ford signed the United States Toxic Substances Control Act in the fall of 1976, tens of thousands of synthetic chemicals had entered world markets with no evidence of their safety... Ford's signing statement described a law giving the Environmental Protection Agency (EPA) broad regulatory authority to require toxicity testing and reporting to determine whether the chemicals posed risks." "If a chemical is found to present a danger to health or the environment," Ford promised, "appropriate regulatory action can be taken before it is too late to undo the damage."

That's not what happened. The 60,000-plus chemicals already in commerce were grandfathered into the law on the assumption that they were safe. And the EPA faced numerous hurdles, including pushback from the chemical industry that undermined its ability to implement the law. Several articles explore the failure of regulations to keep hazardous chemicals from polluting our food, air, and drinking water. Maricel Maffini and her colleagues describe the failure of regulators to account

¹⁰⁶ <https://enveurope.springeropen.com/articles/10.1186/s12302-014-0014-5>

¹⁰⁷ [https://www.cmec.ca/252/Programs-and-Initiatives/Assessment/Programme-for-International-Student-Assessment-%20\(PISA\)/PISA-2012/index.html](https://www.cmec.ca/252/Programs-and-Initiatives/Assessment/Programme-for-International-Student-Assessment-%20(PISA)/PISA-2012/index.html)

¹⁰⁸ <http://www.oecd.org/unitedkingdom/building-skills-for-all-review-of-england.pdf>

¹⁰⁹ [PLOS Biology Explores Gaps between Environmental Health Science and Policy | PLOS Blogs Network](https://doi.org/10.1371/journal.pbio.2004814)

¹¹⁰ <http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.2004814>

for health risks associated with the thousands of chemicals introduced into the food system since 1958, when Congress authorized the Food and Drug Administration to ensure the safety of substances added to food. Chemicals from agriculture, industry, and other commercial uses routinely enter drinking water supplies."

Joseph M Braun and Kimberley Gray: Challenges to studying the health effects of early life environmental chemical exposures on children's health. ¹¹¹

Maricel V Maffini, Thomas G Neltner, Sarah Vogel: We are what we eat: Regulatory gaps in the United States that put our health at risk. ¹¹²

"The American diet has changed dramatically since 1958, when Congress gave the United States Food and Drug Administration (FDA) the authority to ensure the safety of chemicals in food. Since then, thousands of chemicals have entered the food system. Yet their long-term, chronic effects have been woefully understudied, their health risks inadequately assessed. The FDA has been sluggish in considering scientific knowledge about the impact of exposures—particularly at low levels and during susceptible developmental stages. The agency's failure to adequately account for the risks of perchlorate—a well-characterized endocrine-disrupting chemical—to vulnerable populations is representative of systemic problems plaguing the regulation of chemicals in food. Today, we are faced with a regulatory system that, weakened by decades of limited resources, has fallen short of fully enforcing its mandates. The FDA's inability to effectively manage the safety of hundreds of chemicals is putting our children's health at risk."

Monsanto's Minions: US EPA Hikes Glyphosate Limits in Food and Feed Once Again¹¹³

Organic Consumers Association: "In obedience to a demand from Monsanto, the US EPA is proposing to hike the allowed residue limits -- yet again -- of the herbicide glyphosate in various food and feed crops. The allowed level in teff animal feed will be 100 parts per million (ppm); and in oilseed crops, 40 ppm. Allowed levels in some fruits and vegetables eaten by humans will also rise.

As a comparison, malformations in frog and chicken embryos were documented by Prof Andres Carrasco's team at 2.03 ppm glyphosate, when injected into the embryos. ¹¹⁴

That's why the NHS is failing; patients and staff are eating food poisoned by weedkiller

The amounts of Roundup sprayed by UK farmers on crops has gone from 226,762 kg in 1990 to 2,240,408 kg in 2016, a ten-fold increase and foods imported from the US have glyphosate in them.

Dementia in the UK: predicted 1 million people with dementia in 2025 and 2 million by 2050.

Obesity in the UK: By 2025 the UK will have the highest obesity rates among both men and women in Europe, at 38%: **in contrast in France women have had virtually no increase in BMI over 40 years.** By 2030 74% men and 64% women in the UK will be overweight.

Diabetes in UK: 3 million people in 2012: 3.7 million people in 2017. Type 2 Diabetes in young people rose 41% in 3 years.

Asthma 5.4 million People in the UK are currently receiving treatment for asthma: 1.1 million children (1 in 11) and 4.3 million adults (1 in 12) (2017). It is estimated by the World Health Organisation that 300 million individuals have asthma worldwide, and that with current rising trends this will reach 400 million by 2025. Approximately 250,000 people die prematurely each year from asthma; almost all these deaths are avoidable (2013).

Allergies More than 150 million Europeans suffer from chronic allergic diseases and the current prediction is that by 2025 half of the entire EU population will be affected. The UK has some of the highest prevalence rates of allergic conditions in the world, with over 20% of the population affected

¹¹¹ <http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.2002800>

¹¹² <http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.2003578>

¹¹³ <https://www.organicconsumers.org/news/monsantos-minions-us-epa-hikes-glyphosate-limits-food-and-feed-once-again>

¹¹⁴ <http://pubs.acs.org/doi/abs/10.1021/tx1001749>

by one or more allergic disorder. A staggering 44% of British adults now suffer from at least one allergy and the number of sufferers is on the rise, growing by around 2 million between 2008 and 2009 alone. Almost half (48%) of sufferers have more than one allergy.

Atopic Eczema In 45% of children, the onset of Atopic Eczema occurs during the first 6 months of life; during the first year 60% of these children are affected, and 85% are affected before the age of five. With a life time prevalence of 15-30% in children and 2-10% in adults, the incidence of AE has increased by two- to threefold in industrialized countries during the past three decades.

Allergic Rhinitis Allergic rhinitis is the most common form of non-infectious rhinitis, affecting between 10% and 30% of all adults and as many as 40% of children. Up to 57% of adult patients and up to 88% of children with AR have sleep problems, including micro-arousals, leading to daytime fatigue and somnolence, and decreased cognitive functioning.

Chronic kidney Disease Over a ten-year period from 2005 to 2015, the number of people dying from chronic kidney disease across the world rose by 31.7%. Donal O'Donoghue, President of the Renal Association said in 2016: "Around 1.2 million people are dying across the world every year because of chronic kidney disease." Kidney Research UK estimates that, in the UK alone, some three million lives are at risk from CKD with one million of these cases undiagnosed.

Deaths from Chronic Liver Disease has dramatically increased between 1970 and 2018. Liver disease is the only major cause of death still increasing year-on-year (apart from cancers!) There is direct proof that Roundup causes liver damage. Dr Antoniou's most recent research used a new cutting-edge technique and is the first to show a definite link between ultra-low dose Roundup and non-alcoholic fatty liver disease (NAFLD). This condition has increased greatly in the US and the UK. *Multiomics reveal non-alcoholic fatty liver disease (NAFLD) in rats following chronic exposure to an ultra-low dose of Roundup herbicide.*¹¹⁵ NAFLD currently affects **25% of the US population** and **similar numbers of Europeans.**

Sight loss in UK; cataracts and macular degeneration: In 2015 2 million; 2.7 million by 2030; 4 million by 2050. As ECHA's Risk Assessment Committee stated on March 15 2017: "*glyphosate is classified as causing serious eye damage.*"¹¹⁶

Stroke death statistics for 2016. Male: 16,023; Female: 21,748; Total: 37,771. Men: 5,000 more deaths than from prostate cancer; Women: twice as many deaths as from breast cancer.

Autism incidence in US: in 1970 1:10,000; in 2007 1:150; in 2009 1: 100; in 2013 1:50 in 2025 1:2.

Cancers in the UK: see page 13 for CRUK figures of increasing new cancers and increasing deaths.

Cancer deaths worldwide: in 2011, 7 million deaths; predicted to rise to 12 million by 2030.

Neurological deaths are classified by the WHO in two categories. Alzheimer's and other dementias and nervous disease deaths. The latter include such disparate conditions as Parkinson's disease, motor neuron disease (MND), hereditary neuromuscular conditions, prion disorders, degenerative diseases, including Creutzfeldt Jacob's disease (CJD). Ten major developed Western countries and 10 smaller Western countries were studied. Total neurological deaths rose substantially between 1980 and 2010 in both sexes in 16 out of 20 western countries. The mortality was significantly higher in females. "*Moreover, looking back 30 or more years the concept of early dementia or the need for the creation of a Young Parkinson's Disease Society in Britain would have seemed a tautology.*"¹¹⁷

That's why four out of five adults in the UK are at risk of an early death from heart disease¹¹⁸

The *Guardian* reported: "*Four out of five adults have hearts that are more damaged than they should be for their age, putting them at greater risk of early death, a major study has shown. The*

¹¹⁵ <http://www.nature.com/articles/srep39328>

¹¹⁶ <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>

¹¹⁷ <https://www.sciencedirect.com/science/article/pii/S0033350612004672>

¹¹⁸

<http://click.mail.theguardian.com/?qs=d630c54dd6ca7648ce60b06748ec708aab1fe85425226ecd276c9ebc4a1570128b2999587bdcbbca128856ee8c4a467d>

disclosure prompted calls for Britons to ditch their unhealthy lifestyles and monitor their own health more closely in order to reduce their risk of having a heart attack or stroke.”

Roundup (shown to be carcinogenic and to affect human brains) is sprayed to kill weeds on pavements, open spaces, City Parks, playgrounds and playing fields in all Boroughs but one

Only the London Borough of Hammersmith and Fulham has agreed to ban Roundup and try other non-chemicals methods.¹¹⁹ All the Councils in Wales use Roundup.¹²⁰ Presumably, like us in Wales, they asked the Health and Safety Executive, who said that glyphosate was perfectly legal.

Neurotransmitter changes in the brain from exposure to Glyphosate-based Herbicides: see page 3

The UN expert on Toxics, Baskut Tuncak wrote in the *Guardian* on 06/11/2017: The EU and glyphosate: it's time to put children's health before pesticides¹²¹

“A pending decision on Monsanto’s ubiquitous weedkiller is a crucial opportunity to protect our children from the toxic cocktail of pesticides polluting their food, water and play areas.”

*“Our children are growing up exposed to a toxic cocktail of weedkillers, insecticides, and fungicides. It’s on their food and in their water, **and it’s even doused over their parks and playgrounds.** Many governments insist that our standards of protection from these pesticides are strong enough. But as a scientist and a lawyer who specialises in chemicals and their potential impact on people’s fundamental rights, I beg to differ. Last month it was revealed that in recommending that glyphosate – the world’s most widely-used pesticide – was safe, the EU’s food safety watchdog copied and pasted pages of a report directly from Monsanto, the pesticide’s manufacturer. Revelations like these are simply shocking.*

The UN Convention on the Rights of the Child, the most ratified international human rights treaty in the world (only the US is not a party), makes it clear that states have an explicit obligation to protect children from exposure to toxic chemicals, from contaminated food and polluted water, and to ensure that every child can realise their right to the highest attainable standard of health. These and many other rights of the child are abused by the current pesticide regime. These chemicals are everywhere and they are invisible. The only way to protect citizens, especially those disproportionately at risk from exposure, is for governments to regulate them effectively, in large part by adhering to the highest standards of scientific integrity.

Paediatricians have referred to childhood exposure to pesticides as creating a “silent pandemic” of disease and disability. Exposure in pregnancy and childhood is linked to birth defects, diabetes, and cancer. Because a child’s developing body is more sensitive to exposure than adults and takes in more of everything – relative to their size, children eat, breathe, and drink much more than adults – they are particularly vulnerable to these toxic chemicals. Increasing evidence shows that even at “low” doses of childhood exposure, irreversible health impacts can result. But, most victims cannot prove the cause of their disability or disease, limiting our ability to hold those responsible to account. In light of revelations such as the copy-and-paste scandal, a careful re-examination of the performance of states is required. The overwhelming reliance of regulators on industry-funded studies, the exclusion of independent science from assessments, and the confidentiality of studies relied upon by authorities must change.”

On December 12th 2017 the EU Commission relicensed glyphosate for 5 years. The British Government ignored the plea by Baskut Tuncak and voted with the Commission, but did they read ECHA’s full classification?

¹¹⁹ <https://www.hortweek.com/london-council-bans-contractor-use-glyphosate-parks/parks-and-gardens/article/1398373>

¹²⁰ <https://www.walesonline.co.uk/news/local-news/welsh-councils-use-carcinogenic-weedkiller-15086510>

¹²¹ <https://www.theguardian.com/environment/2017/nov/06/the-eu-and-glyphosate-its-time-to-put-childrens-health-before-pesticides>

“ECHA's Committee for Risk Assessment (RAC) agrees to maintain the current harmonised classification of glyphosate as a substance causing serious eye damage and being toxic to aquatic life with long-lasting effects. RAC concluded that the available scientific evidence did not meet the criteria to classify glyphosate as a carcinogen, as a mutagen or as toxic for reproduction.”¹²²

‘Air pollution’ in London; Roundup weedkiller is the ‘elephant in the room’

Damian Carrington reports: Scientists have found the first evidence that particles of air pollution travel through pregnant women’s lungs and lodge in their placentas.¹²³ Toxic air is already strongly linked to harm in foetuses but how the damage is done is unknown. The new study, involving five mothers living in London, UK, revealed sooty particles in the placentas of each of their babies and researchers say it is quite possible the particles entered the foetuses too.

THIS IS SPECULATION, NOT SCIENCE: TO SATISFY CANCER RESEARCH UK WHICH HAS DONATED MONEY TO THE UNIVERSITY: THE PLACENTAS OF ONLY FIVE PREGNANT WOMEN WERE EXAMINED

“It is a worrying problem – there is a massive association between air pollution a mother breathes in and the effect it has on the foetus,” said Dr Lisa Miyashita, at Queen Mary University of London, one of the research team. *“It is always good if possible to take less polluted routes if you are pregnant – or indeed if you are not pregnant. I avoid busy roads when I walk to the station.”*

A series of previous studies have shown that air pollution significantly increases the risk of premature birth and of low birth weight, leading to lifelong damage to health. A large study of more than 500,000 births in London, published in December, confirmed the link and led doctors to say that the implications for many millions of women in polluted cities around the world are *“something approaching a public health catastrophe”*. Weedkiller is sprayed over almost all of these cities.

Cancer Research UK (CRUK) donated £12.2m in funding to the Barts Fund, Queen Mary University London. This study on only five placentas was supported by the Barts fund.

CRUK protects the agrochemical industry. CRUK said that there was little evidence that pesticides caused cancer.

The Faroes Statement: Human Health Effects of Developmental Exposure to Chemicals in Our Environment¹²⁴

In 2007 twenty-five experts in environmental health from eleven countries (including from the UK) met on the Faroes and contributed to this statement. *“The periods of embryonic, foetal and infant development are remarkably susceptible to environmental hazards. Toxic exposures to chemical pollutants during these windows of increased susceptibility can cause disease and disability in infants, children and across the entire span of human life. Among the effects of toxic exposures recognized in the past have been spontaneous abortion, congenital malformations, lowered birthweight and other adverse effects. These outcomes may be readily apparent. However, even subtle changes caused by chemical exposures during early development may lead to important functional deficits and increased risks of disease later in life. The timing of exposure during early life has therefore become a crucial factor to be considered in toxicological assessments.”*

“The brain’s development is uniquely sensitive to toxic chemicals and even small deficits may negatively impact our academic achievements, economic success, risk of delinquency, and quality of life. Chemicals such as mercury, polychlorinated biphenyls (PCBs) arsenic and certain pesticides pose an insidious threat to the next generation’s brains. When chemicals in the environment affect development of the child’s brain, he or she is at risk for mental retardation, cerebral palsy, autism, ADHD, and a range of learning disabilities and other deficits that will remain for a lifetime.”

¹²² <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>

¹²³ <https://www.theguardian.com/environment/2018/sep/16/air-pollution-particles-found-in-mothers-placentas>

¹²⁴ <http://www.ncbi.nlm.nih.gov/pubmed/18226057>

ONLY ONE CHANCE How Environmental Pollution Impairs Brain Development - and How to Protect the Brains of the Next Generation by Professor Philippe Grandjean: Oxford University Press.¹²⁵

Review by the late THEO COLBORN, PHD, President, TEDX (the Endocrine Disruptor Exchange)

"This book is a huge gift to humankind from an eminent scientist. Grandjean tells the truth about how we have been ruining the brain power of each new generation and asks if there are still enough intelligent people in the world today to reverse the problem. I cannot rid myself of the idea that too many brains have been drained and society is beyond the point of no return. We must learn from the follies and scandals that Grandjean reveals and stop the chemical brain drain before it is too late."

Neurobehavioural effects of developmental toxicity¹²⁶

*"Neurodevelopmental disabilities, including autism, attention-deficit hyperactivity disorder, dyslexia, and other cognitive impairments, affect millions of children worldwide, and some diagnoses seem to be increasing in frequency. Industrial chemicals that injure the developing brain are among the known causes for this rise in prevalence. Since 2006, epidemiological studies have documented six additional developmental neurotoxicants—manganese, fluoride, **chlorpyrifos**, dichlorodiphenyl-trichloroethane, tetrachloroethylene, and the polybrominated diphenyl ethers. Pesticides mentioned, each with supporting references, were: **Acetamiprid**, amitraz, avermectin, emamectin, fipronil (Termidor), **glyphosate**, hexaconazole, **imidacloprid**, tetramethylenedisulfotetramine. We postulate that even more neurotoxicants remain undiscovered. Untested chemicals should not be presumed to be safe to brain development, and chemicals in existing use and all new chemicals must therefore be tested for developmental neurotoxicity. To coordinate these efforts and to accelerate translation of science into prevention, we propose the urgent formation of a new international clearinghouse." The ones in bold are still registered by Defra/Fera in the UK.*

UK refused to acknowledge that exposure to pesticides during pregnancy is harmful

Defra quoted a Review by Dow scientists, (the manufacturer of Chlorpyrifos) on Pesticide Exposure and Neurodevelopmental Outcomes: Review of the Epidemiologic and Animal Studies¹²⁷ "As a whole, the epidemiologic studies did not strongly implicate any particular pesticide as being causally related to adverse neurodevelopmental outcomes in infants and children."

Chlorpyrifos is a widely used and highly-volatile neurotoxic chemical that study after study has shown is harming the development of children's brains. When mothers are exposed during pregnancy, their children are at higher risk of having lower IQs, developmental delays and autism. In fall 2016, EPA's own scientists published a follow-up assessment of health risks that found that, through their diet, infants were being exposed to the pesticide at levels 140 times what could be considered safe. When Trump came into power Dow Chemical Company contributed \$1 million to his inauguration, so he ordered the EPA to unban chlorpyrifos. The *Washington Post* wrote an article about why that happened, when the US EPA had said it was a dangerous chemical. "*Chlorpyrifos belongs to the same chemical family as sarin nerve gas and works by attacking the nervous system. Epidemiological evidence suggests that Chlorpyrifos can cause brain damage in children and even to the unborn. A California study found that pregnant women who lived near fields where Chlorpyrifos was sprayed were three times more likely to give birth to a child who would develop autism.*"

Evaggelos Vallianatos, who worked for the US EPA for 25 years and then became a whistleblower, says "*It is a chemical warfare agent.*"¹²⁸

Chlorpyrifos (a sarin-like neurotoxin) was used on 107,739 ha crop land in 2015 by UK farmers

In 2010 the UK Health and Safety Executive, along with their counterparts in Spain, following an interim period of withdrawal, worked about as determinedly as they could to have OPs. reinstated

¹²⁵ <http://www.env-health.org/news/latest-news/article/book-review-only-one-chance-by>

¹²⁶ [http://www.thelancet.com/pdfs/journals/laneur/PIIS1474-4422\(13\)70278-3.pdf](http://www.thelancet.com/pdfs/journals/laneur/PIIS1474-4422(13)70278-3.pdf)

¹²⁷ <https://www.tandfonline.com/doi/abs/10.1080/10937404.2013.783383>

¹²⁸ <http://vallianatos.blogspot.com/2018/09/deceit.html>

for widespread use throughout the EU. Spain was the Rapporteur Member State for chlorpyrifos.¹²⁹ Once again, and largely thanks to them it was made legal for use once again. The effects on children included lower birth weight and reduced I.Q., with farmworkers also reporting loss of working memory and other health consequences that at times resulted in hospital admissions.

Syngenta's settlement in Hawaii for workers being sprayed with chlorpyrifos¹³⁰

In Hawaii February 2018 the U.S. Environmental Protection Agency won a settlement from Syngenta, after dozens of workers at Syngenta Seeds' former research farm on Kauai, Hawaii were exposed to the neurotoxic pesticide chlorpyrifos in 2016 and 2017. *"In 2016 nineteen workers were exposed to chlorpyrifos after Syngenta sprayed the insecticide on a field of genetically engineered (GE) corn at its Kekaha farm. According to the complaint, the workers were allowed to re-enter the field before the re-entry period expired and without protective equipment. Ten workers were taken to the hospital and three were held overnight. In recent years over 16,000 acres of Kauai's land have been leased to DuPont-Pioneer, Dow, and Syngenta because its tropical climate enables them to work their fields year-round. Company workers can plant experimental fields three seasons a year, which can cut in half the time it takes to develop a new genetically altered seed. They plant these seeds, then spray them with a wide variety of chemicals that are designed to kill weeds and insects. When they find food crops that can stand up to these toxins, they begin the process of taking them to market. The final settlement was a meagre \$150,000, with \$400,000 more to be spent on worker protection, far less – as Alexis Strauss, acting regional administrator for the EPA's Region 9, acknowledged – than the maximum allowed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and its regulations designed to protect workers."*

Monsanto found guilty of concealing that Roundup caused cancer

At a lawsuit in the US on 10 August 2018, Monsanto was found guilty of concealing (with malicious intent) the fact that Roundup caused cancer. A terminally ill groundsman who has advanced Non-Hodgkin's Lymphoma was awarded \$289 million by a unanimous decision by the jury.¹³¹ There are more than 4,000 plaintiffs waiting for their opportunity to sue in October 2018.

Cancer Research UK, the CMO England, PHE and the BMJ linked cancer to alcohol, obesity and smoking. They blamed the people for 'lifestyle choices'. **The British Government refused to ban Roundup because CRUK said it didn't cause cancer.**

Maternal and fetal exposure to pesticides associated to genetically modified foods

The US EPA claimed that Bt-toxin was destroyed during digestion in humans. But a 2011 Canadian study conducted at Sherbrooke Hospital discovered that 93 percent of the pregnant women they tested had Bt-toxin in their blood. And so too did 80 percent of their unborn fetuses.¹³² This is also the first study to reveal the presence of circulating pesticides (glyphosate and glufosinate) associated with genetically modified food in women with and without pregnancy, paving the way for a new field in reproductive toxicology including nutrition and utero-placental toxicities.

Destruction of the global environment with biocides

The UK State of Nature Report 2016

Mark Eaton of the RSPB, the Report's first author said: *"The report includes a new "biodiversity intactness index", which analyses the loss of species over centuries. The UK has lost significantly more nature over the long term than the global average with the UK the 29th lowest out of 218*

¹²⁹ <https://efsa.onlinelibrary.wiley.com/doi/10.2903/j.efsa.2011.1961>

¹³⁰ <https://gmandchemicalindustry9.wordpress.com/2018/03/24/toxic-pesticides-will-hawaiians-get-a-better-deal-than-brits/>

¹³¹ <https://www.courthousenews.com/jury-finds-monsanto-liable-in-roundup-cancer-trial/>

¹³² <https://www.sciencedirect.com/science/article/pii/S0890623811000566>

countries. “It is quite shocking where we stand compared to the rest of the world, even compared to other western European countries: France and Germany are quite a way above us in the rankings,” said Eaton. “The index gives an idea of where we have got to over the centuries, and we are pretty knackered.”

Biodiversity Intactness Index

This is a link to an animated pictorial representation but it is not easily findable.¹³³

“Of 218 countries assessed, the UK is ranked 189: it is 29th lowest out of 218: Countries below are the Republic of Ireland, USA, Hong Kong and Macao. This means that nature is faring worse in the UK than in most other countries.

Around 75% of the UK is managed for food production. How we manage that land is key to the state of Nature.

UK 165 species are considered critically endangered and likely to go extinct.

England 109 species are critically endangered and likely to go extinct.

Scotland 65 species are critically endangered and are likely to go extinct.

Northern Ireland 45 species are critically endangered and likely to go extinct.

Wales 41 species are critically endangered and likely to go extinct.”

NFU vice-president Guy Smith said “intensification of farming had ended in the early 1990s.” that farmers “were using less fertiliser and pesticides than ever” and a spokeswoman from Defra said: “Protecting our precious environment and supporting our world-leading farmers, a cornerstone of our economy, will form an important part of our EU exit negotiations.”

The NFU, Defra, CRD and HSE are colluding to deliberately mislead the public; FERA Science figures obtained under FOI are below.

The Royal Society of Medicine Conference on pesticides safety in November 2017¹³⁴

At the Royal Society of Medicine Conference on pesticides safety the Soil Association organised by its Policy Director, the late Peter Melchett, presented alarming figures. Under FOI request FERA Science (previously a government agency, now privatized) provided figures that showed that the number of active ingredients applied to wheat had risen **12-fold** from 1.7 in 1974 to 20.7 in 2014; that those applied to potatoes had risen **5.8** times from 5.3 in 1975 to 30.8 in 2014; that those applied to onions and leeks had risen **18-fold** from 5.3 in 1975 to 30.8 in 2014.

Roundup sprayed on weeds outside the reserve has poisoned our nature reserve in South Wales

We established a small nature reserve in 2006. We published two photo-journals in 2010. Speckled Bush Crickets and The Year of the Bumblebee. In 2013 biodiversity started to decline. In 2014 we published a paper about it in the former Institute of Science in Society.¹³⁵ In 2018, the few remaining butterflies are completely disorientated, don’t recognise their food plants and don’t lay eggs.

Chronic mass mortalities of cockles in the Burry Inlet, Swansea since 2002 caused by Roundup

Burry Inlet Cockle Mortalities Investigation 2009-2011 ¹³⁶

“Chronic mass mortalities of cockles in the Burry Inlet have been observed annually since 2002. These events occur during the summer months and it is estimated that the financial loss to the commercial fishery between 2003 and 2007 is £14 million.” Roundup is sprayed on weeds during the summer months.

¹³³ <https://ww2.rspb.org.uk/whatwedo/stateofnature2016>

¹³⁴ <https://www.soilassociation.org/news/2017/november/rapid-increase-in-pesticide-use-and-new-evidence-of-health-impacts-of-very-low-doses/>

¹³⁵ http://www.i-sis.org.uk/How_Roundup_Poisoned_My_Nature_Reserve.php

¹³⁶ <https://cronfa.swan.ac.uk/Record/cronfa13095>

The endocrine disruptor effect of the herbicides, atrazine and glyphosate, on *Biomphalaria alexandrina* snails.¹³⁷

Abstract: Atrazine (AZ) and glyphosate (GL) are herbicides that are widely applied to cereal crops in Egypt. The present study was designed to investigate the response of the snail *Biomphalaria alexandrina* (Mollusca: Gastropoda) as a bioindicator for endocrine disruptors in terms of steroid levels (testosterone (T) and 17 β -estradiol (E)), alteration of microsomal CYP4501B1-like immunoreactivity, total protein (TP) level, and gonadal structure after exposure to sublethal concentrations of AZ or GL for 3 weeks. In order to study the ability of the snails' recuperation, the exposed snails were subjected to a recovery period for 2 weeks. The results showed that the level of T, E, and TP contents were significantly decreased ($p \leq 0.05$) in both AZ- and GL-exposed groups compared with control (unexposed) group. The level of microsomal CYP4501B1-like immunoreactivity increased significantly ($p \leq 0.05$) in GL- and AZ-exposed snails and reach nearly a 50% increase in AZ-exposed group. Histological investigation of the ovotestis showed that AZ and GL caused degenerative changes including azoospermia and oocytes deformation. Interestingly, all the recovered groups did not return back to their normal state. It can be concluded that both herbicides are endocrine disruptors and cause cellular toxicity indicated by the decrease of protein content and the increase in CYP4501B1-like immunoreactivity. This toxicity is irreversible and the snail is not able to recover its normal state. The fluctuation of CYP4501B1 suggests that this vertebrate-like enzyme may be functional also in the snail and may be used as a biomarker for insecticide toxicity.

Warning of 'ecological Armageddon' after dramatic plunge in insect numbers

Three-quarters of flying insects in nature reserves across Germany have vanished in 25 years, with serious implications for all life on Earth, scientists say.¹³⁸ More than 75 percent decline over 27 years in total flying insect biomass in protected areas.¹³⁹

“Global declines in insects have sparked wide interest among scientists, politicians, and the general public. Loss of insect diversity and abundance is expected to provoke cascading effects on food webs and to jeopardize ecosystem services. Here, we used a standardized protocol to measure total insect biomass using Malaise traps, deployed over 27 years in 63 nature protection areas in Germany (96 unique location-year combinations) to infer on the status and trend of local entomofauna. Our analysis estimates a seasonal decline of 76%, and mid-summer decline of 82% in flying insect biomass over the 27 years of study. We show that this decline is apparent regardless of habitat type, while changes in weather, land use, and habitat characteristics cannot explain this overall decline.”

Glyphosate perturbs the gut microbiota of honey bees¹⁴⁰

Abstract: “Increased mortality of honey bee colonies has been attributed to several factors but is not fully understood. The herbicide glyphosate is expected to be innocuous to animals, including bees, because it targets an enzyme only found in plants and microorganisms. However, bees rely on a specialized gut microbiota that benefits growth and provides defense against pathogens. Most bee gut bacteria contain the enzyme targeted by glyphosate, but vary in whether they possess susceptible versions and, correspondingly, in tolerance to glyphosate. Exposing bees to glyphosate alters the bee gut community and increases susceptibility to infection by opportunistic pathogens. Understanding how glyphosate impacts bee gut symbionts and bee health will help elucidate a possible role of this chemical in colony decline.”

¹³⁷ <http://journals.sagepub.com/doi/abs/10.1177/0748233713506959>

¹³⁸ <https://www.theguardian.com/environment/2017/oct/18/warning-of-ecological-armageddon-after-dramatic-plunge-in-insect-numbers>

¹³⁹ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0185809>

¹⁴⁰ <http://www.pnas.org/content/early/2018/09/18/1803880115>

Sex-dependent impact of Roundup on the rat gut microbiome ¹⁴¹

Extracts of Abstract: A growing body of research suggests that dysbiosis of the gut microbiota induced by environmental pollutants, such as pesticides, could have a role in the development of metabolic disorders. We have examined the long-term effects of 3 doses of the Roundup (R) herbicide (made of glyphosate and formulants) on the gut microbiota in male and female Sprague-Dawley rats. In conclusion, we revealed that an environmental concentration of R (0.1 ppb) and other two concentrations (400ppm and 5,000 ppm) have a sex-dependent impact on rat gut microbiome composition and thus warrants further investigation.

The fields where Roundup Ready GM crops are grown in the US are biological deserts

The German Rapporteur Member State Federal Institute for Pesticides Risk Assessment (BfR) Renewal Assessment Report (RAR) on Ecotoxicity¹⁴² broadly concluded that glyphosate is not harmful to the environment. I challenged the European Food Safety Authority about this huge discrepancy.

I quoted from Craig Childs' book, *Apocalyptic Planet*.¹⁴³ Chapter 6 Species Vanish: Page 185. Grundy County, Iowa was where Craig Childs spent a long weekend in a monoculture of GM-Roundup® Ready Corn looking for wildlife.

Page 187: "In this cornfield, I had come to a different kind of planetary evolution. I listened and heard nothing, no bird, no click of an insect ... Page 188: Mr Owen was the farmer who had given us permission to backpack across his cornfields. He grew a combination of DuPont and Monsanto stock. We were in DuPont now. It didn't look any different to me." Page 192: Childs said: "I chose Iowa for a mass-extinction analogue because it is the most thorough picture of genetic exhaustion, the many organs of what was once tallgrass prairie removed and replaced with this."

Robert Krulwich's blog commented on Craig Child's description: ¹⁴⁴ "Corn farmers champion corn. Anything that might eat corn, hurt corn, bother corn, is killed. Their corn is bred to fight pests. The ground is sprayed. The stalks are sprayed again. So, Craig wondered, "What will I find?" The answer amazed me. He found almost nothing. There were no bees. The air, the ground, seemed vacant. He found one ant "so small you couldn't pin it to a specimen board." A little later, crawling to a different row, he found one mushroom, "the size of an apple seed." Then, later, a cobweb spider eating a crane fly (only one). A single red mite "the size of a dust mote hurrying across the barren earth," some grasshoppers, and that's it." Though he crawled and crawled, he found nothing else. "It felt like another planet entirely," he said, a world denuded.

Yet, 100 years ago, these same fields, these prairies, were home to 300 species of plants, 60 mammals, 300 birds, hundreds and hundreds of insects. This soil was the richest, the loamiest in the state. And now, in these patches, there is almost literally nothing but one kind of living thing. We've erased everything else. There's something strange about a farm that intentionally creates a biological desert to produce food for one species: us. It's efficient, yes. But it's so efficient that the ants are missing, the bees are missing, and even the birds stay away. Something's not right here. Our cornfields are too quiet."

Iowa was just one state in which the US Geological Survey said: "Glyphosate and AMPA were detected frequently in soils and sediment, ditches and drains, precipitation, rivers, and streams; and less frequently in lakes, ponds, and wetlands; soil water; and groundwater." ¹⁴⁵

¹⁴¹ https://www.gmoseralini.org/wp-content/uploads/2018/01/Lozano-et-al.-Tox.Rep_.2018.pdf

¹⁴² Renewal Assessment Report Vol 3 Annex B9. Evaluation of peer-reviewed literature regarding ecotoxicity

¹⁴³ Childs, C. *Apocalyptic Planet. Field Guide to the Future of the Earth*, New York: Vintage Books (2013).

¹⁴⁴ <https://www.npr.org/sections/krulwich/2012/11/29/166156242/cornstalks-everywhere-but-nothing-else-not-even-a-bee>

¹⁴⁵ <http://onlinelibrary.wiley.com/doi/10.1111/jawr.12159/abstract>

Massive declines in Monarch Butterfly numbers due to Roundup ¹⁴⁶

The NRDC Report in February 2015: *“Recently, though, a dramatic change in farming practices—the widespread cultivation of genetically engineered, glyphosate-resistant Roundup Ready corn and soybeans—has triggered a precipitous decline of common milkweed, and thus of monarchs. Glyphosate, sold by Monsanto under the name of Roundup, is one of the very few herbicides that is effective on milkweed. Unlike many other weedkillers, once absorbed it is translocated (moved internally) to root tissue, where it kills milkweed at the root and so prevents regeneration. Glyphosate is particularly lethal to milkweed when used in conjunction with Roundup Ready crops. It is applied more frequently, at higher rates, and later in the season—during milkweed’s most vulnerable flowering stage of growth—than when used with traditional crops. The increasingly common practice of growing Roundup Ready crops continuously on the same fields means that milkweed is exposed to glyphosate every year, with no opportunity to recover.”*

Birth defects in animals in Montana correlates with glyphosate usage on crops and with birth defects in humans

A recent study by Hoy *et al.* found alarming increases in congenital malformations in wildlife in Montana that Hoy has been documenting for the past 19 years. ¹⁴⁷ Similar birth defects have occurred in humans in the USA. Their graphs illustrating human disease patterns over the twelve-year period correlate remarkably well with the rate of glyphosate usage on corn, soy and wheat crops, which has increased due to “Roundup® Ready” crops. While the animals’ exposure to the herbicide is through food, water and air, the authors believe that human exposure is predominantly through food, as the majority of the population does not reside near agricultural fields and forests. They conclude: *“Our over-reliance on chemicals in agriculture is causing irreparable harm to all beings on this planet, including the planet herself. Most of these chemicals are known to cause illness, and they have likely been causing illnesses for many years. But until recently, the herbicides have never been sprayed directly on food crops, and never in this massive quantity. We must find another way”*.

The coral on the Great Barrier Reef has been destroyed because the Australian Regulators did not read the instructions: Roundup and the systemic neonicotinoid pesticides are highly toxic to aquatic life. Instructions for use state that all water bodies should be protected

Instructions for using Roundup Advance AG Herbicide by Monsanto include: *“Protection of Wildlife, Fish, Crustacea and Environment. Do not contaminate dam, river or stream with the product.”* ¹⁴⁸ Clothianidin (Sumitomo Shield a systemic neonicotinoid insecticide) has been granted registration by the Australian Pesticides and Veterinary Medicines Authority (AVMA) for use on very low-lying sugar cane plantations draining into the Great Barrier Reef. In addition to global warming that is why there has been progressive destruction and bleaching of coral.

Instructions: PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT ¹⁴⁹

*DO NOT apply under weather conditions, or from spraying equipment, that may cause spray drift onto nearby or adjacent areas, particularly wetlands, water-bodies or watercourses. **This product is highly toxic to aquatic invertebrates.** DO NOT contaminate streams, rivers or waterways with the chemical or used containers. DO NOT apply when there are aquatic and wetland areas including aquacultural ponds or surface streams and rivers downwind from the application area and within the mandatory no-spray zone shown in table 1.*

¹⁴⁶ https://www.centerforfoodsafety.org/files/cfs-monarch-report_2-4-15_design_05341.pdf

¹⁴⁷ <http://www.esciencecentral.org/journals/the-high-cost-of-pesticides-human-and-animal-diseases-2375-446X-1000132.php?aid=56471>

¹⁴⁸ <http://websvr.infopest.com.au/LabelRouter?LabelType=L&ProductCode=70096>

¹⁴⁹ http://www.sumitomo-chem.com.au/sites/default/files/pdf/labels/shield_label.pdf

Report by the Queensland Government in 2003 on water quality¹⁵⁰

“Regional assessments of coastal water quality condition found that sites in the Burdekin, Mackay/Whitsunday and south-east Queensland regions most commonly experienced poor water quality. Phosphorus and nitrogen were the two indicators contributing to this rating. Metals bioaccumulated in prawns, shellfish and other marine fauna were greatest in south-east Queensland waterways, particularly canals, and occasionally exceeded Australian food quality standards. In central and north Queensland, the persistence of pesticides and herbicides, including a number of banned substances, in sediment, seagrass and some marine mammals is an issue.”

Herbicides: A new threat to the Great Barrier Reef ¹⁵¹

In 2009, researchers showed runoff of herbicides particularly associated with sugar cane cultivation in the adjacent catchment.

Abstract: The runoff of pesticides (insecticides, herbicides and fungicides) from agricultural lands is a key concern for the health of the iconic Great Barrier Reef, Australia. Relatively low levels of herbicide residues can reduce the productivity of marine plants and corals. However, the risk of these residues to Great Barrier Reef ecosystems has been poorly quantified due to a lack of large-scale datasets. Here we present results of a study tracing pesticide residues from rivers and creeks in three catchment regions to the adjacent marine environment. Several pesticides (mainly herbicides) were detected in both freshwater and coastal marine waters and were attributed to specific land uses in the catchment. Elevated herbicide concentrations were particularly associated with sugar cane cultivation in the adjacent catchment. We demonstrate that herbicides reach the Great Barrier Reef lagoon and may disturb sensitive marine ecosystems already affected by other pressures such as climate change.

Summary of Center for Food Safety Pesticide Report for Hawaii¹⁵²

Hawai'i leads the nation in GE crop field trials, with tests on 1,141 sites in 2014 alone, representing a far higher density of field tests than on larger mainland states (3.1). The majority of GE crops tested in Hawai'i are corn (67%) or soybeans (24%), while virtually no GE crops relevant to Hawai'i's food needs are being tested (3.2). The most commonly tested GE “trait” is herbicide-resistance (82% of field releases over the past two years), which permits heavier and more frequent spraying of herbicides than is otherwise possible (3.2 & 3.4).

Hawai'i's incredible biodiversity and many threatened and endangered species are at risk from intensive pesticide use on the Islands. For instance, atrazine contamination of surface water threatens amphibian life, while many insecticides heavily used in seed corn operations are toxic to bees.

Worldwide Fund for Nature's (WWF) Living Blue Planet Report on the state of the world's oceans

WWF Living Blue Planet Report - an updated study of marine mammals, birds, reptiles and fish - shows that marine populations have declined by 49% between 1970 and 2012.¹⁵³

It was published in September 2015 and painted a bleak picture of the state of the world's oceans: marine populations, including reef ecosystems, have halved in size since 1970 and some species are teetering on the brink of extinction.¹⁵⁴ Coral reef cover has declined by 50% in the last 30 years and reefs could disappear by as early as 2050, the report says, if current rates of ocean warming and acidification continue. WWF estimates that 850 million people depend directly on coral reefs for their food security - a mass die-off could trigger conflict and human migration on a massive scale.

¹⁵⁰ <https://web.archive.org/web/20070614223713/http://www.epa.qld.gov.au/register/p01258bs.pdf>

¹⁵¹ <https://www.sciencedirect.com/science/article/pii/S0269749109001304>

¹⁵² http://www.centerforfoodsafety.org/files/pesticidereportfull_86476.pdf

¹⁵³ http://assets.wwf.org.uk/downloads/living_blue_planet_report_2015.pdf

¹⁵⁴ <http://www.theguardian.com/global/the-coral-triangle/2015/sep/25/wwf-worlds-richest-reef-system-could-soon-succumb-to-climate-change>

100 million of these reef-reliant peoples live in the Coral Triangle – singled out in the report as “richer in marine natural capital” than anywhere else on earth. Currently, fisheries exports from the Coral Triangle – which encompasses the waters of Indonesia, Malaysia, Philippines, Papua New Guinea, Solomon Islands and Timor Leste – amount to around \$5bn (£3.3bn), including 30% of the global tuna catch, and a lucrative trade in live reef fish for food markets, which is worth nearly \$1bn (£655m). But there are serious questions about the sustainability of these fisheries.

But the severest threat is to the reef ecosystems themselves: 85% of reefs in the Coral Triangle are classified as threatened, significantly higher than the global average of 60%.

More than 40 per cent of coral loss has been caused by outbreaks of the coral-eating crown-of-thorns starfish, which are fuelled by nutrient run-off from farms (De’ath et al., 2012). WWF is working with farmers, governments and companies to cut pollution so coral can recover.

Monsanto, the UK and the US Governments have poisoned orcas¹⁵⁵ by manufacturing PCBs

Report by Damian Carrington 27/09/2018: *Although the poisonous chemicals, PCBs, have been banned for decades, they are still leaking into the seas. They become concentrated up the food chain; as a result, killer whales, the top predators, are the most contaminated animals on the planet. Worse, their fat-rich milk passes on very high doses to their newborn calves. PCB concentrations found in killer whales can be 100 times safe levels and severely damage reproductive organs, cause cancer and damage the immune system. The new research analysed the prospects for killer whale populations over the next century and found those offshore from industrialised nations could vanish as soon as 30-50 years. Among those most at risk are the UK’s last pod, where a recent death revealed one of the highest PCB levels ever recorded.* Others off Gibraltar, Japan and Brazil and in the north-east Pacific are also in great danger. Killer whales are one of the most widespread mammals on earth but have already been lost in the North Sea, around Spain and many other places. Lucy Babey, deputy director at conservation group Orca, said: “Our abysmal failures to control chemical pollution ending up in our oceans has caused a killer whale catastrophe on an epic scale. It is essential that requirements to dispose safely of PCBs under the Stockholm Convention are made legally binding at the next meeting in May 2019 to help stop this scandal.” Scientists have previously found “extraordinary” levels of toxic pollution even in the 10km-deep Mariana trench in the Pacific Ocean.

Monsanto’s PCBs were manufactured in Wales between 1949 and 1977

The British government was also involved in the PCB conspiracy...against Wales

Monsanto manufactured Polychlorinated biphenyls (PCBs) from 1930-1977 primarily for insulating fluids in heavy-duty electrical equipment in plants. Internal documents have surfaced showing that Monsanto knew about the health risks of PCBs long before they were banned. A document, dated Sept. 20, 1955, stated: “We know Aroclors [PCBs] are toxic but the actual limit has not been precisely defined.”¹⁵⁶ Company papers subsequently released in America show that for more than 30 years Monsanto had sat on lab tests results that showed PCBs were fatal to rats and other animals.¹⁵⁷ Monsanto also manufactured Agent Orange between 1961 and 1971 that was a mixture of equal parts of two herbicides, 2,4,5-T and 2,4-D. 2,4,5-T was banned because of its toxicity and frequent contamination with a dioxin, a chemical that is a carcinogen and a persistent organic pollutant. In addition to Agent Orange’s damaging environmental effects, the chemical has caused major health

¹⁵⁵ <https://www.theguardian.com/environment/2018/sep/27/orca-apocalypse-half-of-killer-whales-doomed-to-die-from-pollution>

¹⁵⁶ <https://www.ecowatch.com/monsanto-ordered-to-pay-46-5-million-in-pcb-lawsuit-in-rare-win-for-pl-1891143419.html>

¹⁵⁷

http://www.theecologist.org/The_Brofiscin_Monsanto_Files/777777/burying_the_truth_the_organic_ecologist_investigation_into_monsanto_and_brofiscin_quarry.html

problems for many individuals who were exposed.

Up to 4 million people in Vietnam were exposed to the defoliant, with around 1 million now suffering serious health issues. The chemical is capable of damaging genes, resulting in deformities among offspring of exposed victims. The U.S. government has documented higher cases of leukaemia, non-Hodgkin's lymphoma, as well as other various kinds of cancer in exposed veterans. Exposed US Veterans were compensated.¹⁵⁸ The *New York Times* in May 2014 wrote a Report about its long toxic legacy to the Vietnamese as well: *"But Agent Orange's legacy was only beginning. More than 40 years later, it still casts a long shadow."*¹⁵⁹

Chemicals made during wars as weapons

Monsanto was a company founded in World War I as part of the Rockefeller network of war chemicals makers. Monsanto, at the invitation of the British Government led by Clement Richard Attlee, established a factory (as far away from Westminster as possible) in Newport, Wales, in 1949.¹⁶⁰ From then on, they manufactured PCBs until 1977 and a number of other dangerous chemicals. Monsanto was found to be dumping toxic waste in the River Severn, public waterways and sewerage. After that they paid a contractor to illegally *dump "thousands of tons of cancer-causing chemicals - among them PCBs, dioxins and Agent Orange derivatives"* at two quarries in Wales: Brofiscin (80,000 tonnes) and Maendy (42,000 tonnes) between 1965 and 1972.¹⁶¹ In 1968 US documents showed that Monsanto tried to decide whether or not to come clean about the dangers of the chemicals. They stopped making PCBs in Anniston US in 1971 because of scandals about PCBs on the health of the population and wildlife. However, the British government led by Ted Heath agreed to ramp up production at their Monsanto plant in Newport.

Monsanto continued selling PCBs for years despite knowing the health risks

Arthur Neslen, the Guardian Europe Environment correspondent wrote on 09/08/2017: [Polychlorinated biphenyls \(PCBs\) are long-lived pollutants](#) that were mass produced by Monsanto between 1935 and 1977 for use as coolants and lubricators in electrical equipment such as transformers and capacitors. Monsanto began manufacturing PCBs in 1935, after acquiring the Swann chemical company. It went on to dominate global production.¹⁶² [Monsanto](#) continued to produce and sell toxic industrial chemicals known as PCBs for eight years after learning that they posed hazards to public health and the environment, according to legal analysis of documents put online in a vast searchable archive. More than 20,000 internal memos, minuted-meetings, letters and other documents have been published in the new archive, many for the first time. Most were obtained from legal discovery and access to documents requests digitised by [the Poison Papers Project](#), which was launched by the Bioscience Resource Project and the Center for Media and Democracy. Chiron Return contributed some documents to the library.

Bill Sherman, the assistant attorney general for the US state of Washington – which is suing Monsanto for PCB clean-up costs [potentially worth billions of dollars](#) – said the archive contained damning evidence the state had previously been unaware of. Adverse health effects linked to PCBs had first forced their way on to the company's agenda [in 1937](#), when autopsies revealed that three Monsanto workers had died from severe liver damage after handling the substance. These concerns ratcheted up several levels in 1966, when a landmark study by Soren Jensen discovered the bioaccumulation of PCBs in Baltic fish and sea birds. By the 1970s, nearly 80% of the Baltic Sea's

¹⁵⁸ http://www.benefits.va.gov/compensation/claims-postservice-agent_orange.asp

¹⁵⁹ https://www.nytimes.com/2014/05/12/us/agent-oranges-long-legacy-for-vietnam-and-veterans.html?_r=0

¹⁶⁰ http://www.eastman.com/Company/Worldwide/our_sites/Pages/Newport_SouthWales.aspx

¹⁶¹ <http://www.dailymail.co.uk/news/article-435737/Monsanto-investigation-illegal-dumping.html>

¹⁶² <https://www.theguardian.com/environment/2017/aug/09/monsanto-continued-selling-pcb-for-years-despite-knowing-health-risks-archives-reveal>

three female seal species were found to be infertile, and correlations with PCB exposure were soon established.”

Douglas Gowan was the fall-guy for Monsanto and the British Government

*“From 1967 to 1974, Douglas Gowan represented farmers in the Taff area of South Wales, primarily as a legal adviser with an expertise in toxicology, having first gone to the area to investigate mysterious cattle and sheep deaths, and the abortions occurring in livestock, as a field officer for the National Farmers Union (NFU). He traced the likely cause of the deaths and abortions back to the Monsanto chemical plant in nearby Newport, where significant amounts of waste were being hauled daily to a nearby limestone landfill site operated by Purle Brothers. He was also alarmed by the foaming yellow and purple liquid he could see streaming from the quarry into the ditches and streams across the land.”*¹⁶³ Doug Gowan completed his Report and all parties involved had a site meeting. Monsanto and Purle admitted the site posed a real problem and unveiled a three-phase remediation plan to make it safe. The companies accepted 50/50 liability for the cost and agreed that it would be completed by the end of the year. According to *The Ecologist* article on 11 October 2007:¹⁶⁴ *“It never was, and Gowan was dispatched to America by Geldards to seek further evidence. Here amongst other experts he met one of Monsanto’s chief scientists, Dr William Papageorge, who was known as the company’s ‘PCB Czar’. Dr Papageorge provided him with information that showed Monsanto had long been aware of the hazards of PCBs, and had conducted tests on rats in 1953 that either killed them or affected their reproduction.”*

What does Douglas Gowan know that everyone else wants to keep hidden?

Read the three articles from 2007 to see the extraordinary lengths to which the British government went to protect Monsanto and cover up the truth. ***“What does Douglas Gowan know that everyone else wants to keep hidden? For 40 years the story of Brofiscin Quarry – now the most polluted place in the UK – has been suppressed...”*** Jon Hughes and Pat Thomas reported for *The Ecologist*. *“Documents have been mysteriously lost, witnesses silenced, scientific data ignored. But like the periodic explosions that issue from the depth of the quarry, the truth has a way of blowing up in our faces. Witness protection schemes are normally the preserve of supergrasses or The Sopranos, not people who volunteer evidence in response to a public appeal from a government agency. But that is the position 64-year-old Douglas Gowan finds himself in, having spent the past six months living under police protection. Since volunteering his evidence to the Environment Agency in early 2006 this retired corporate finance director has been subject to death threats, threatening callers to his door and numerous attempted break-ins. Consequently, at the turn of April his protection officers began to talk of placing him under witness protection.*

In March 1969 Purle were dumping into the site on a daily basis and in wet but not stormy weather. Gowan’s tests found about 500 gallons per hour of foaming yellow discharge with an average biological oxygen demand of 2400 parts per million (ppm). BOD provides a snapshot of the quality of a body of water – generally 10 ppm is considered very polluted.”

In 2003 when toxic effluent from the quarry starting leaking into people’s streams in Grosfaen just outside Cardiff, the Environment Agency - a government agency concerned with flooding and pollution – was hired to clean up the site in 2005.

“Firstly, the Agency repeatedly failed to hold Monsanto accountable for its role in the pollution (a role that Monsanto denied from the outset). Secondly, the Agency consistently downplayed the

¹⁶³

http://www.theecologist.org/investigations/politics_and_economics/269077/exclusive_how_the_environment_agency_is_gagging_one_eyewitness_to_what_is_potentially_one_of_the_uk_s_biggest_environmental_crime_s.html

¹⁶⁴

http://www.theecologist.org/The_Brofiscin_Monsanto_Files/777777/burying_the_truth_the_organic_ecologist_investigation_into_monsanto_and_brofiscin_quarry.html

dangers of the chemicals themselves, even claiming that they offered no “identifiable harm or immediate danger to human health” in their official report.”

According to engineering company WS Atkins, in a report prepared for the agency and the local authority in 2005 **but never made public**, Brofiscin Quarry contains at least 67 toxic chemicals. Seven PCBs have been identified, along with vinyl chlorides and naphthalene. The unlined quarry is still leaking, the report says.¹⁶⁵ *“Pollution of water has been occurring since the 1970s, the waste and groundwater has been shown to contain significant quantities of poisonous, noxious and polluting material, pollution of ... waters will continue to occur.”*

Sir Richard Doll was employed by Monsanto to say their chemicals were perfectly safe¹⁶⁶

“On three occasions Monsanto dispatched the late Sir Richard Doll to meet with Gowan. A scientific luminary of the day, who has latterly been exposed as publicly stating chemical compounds such as Agent Orange were safe while secretly being in the pay of Monsanto, Doll told Gowan that PCBs were safe and that Gowan didn’t know what he was talking about.”

No inquiry was held, the effects were minimized and the public was not informed

The official line – given by Graham Hillier (Adviser to Environment Agency Wales) in the press, by the minister of state for the environment at the Welsh Assembly and chief executive of the Environment Agency, in written statements, and by the Defra minister responsible in answer to an oral question to Countess Mar – is that the water at Brofiscin is safe and that dumping only took place towards the west end of the quarry and covers the area the size of a ‘swimming pool’. Only Pringle (the journalist who reported for the Insight Series in The Sunday Times) would speak to The Ecologist, and expressed bewilderment at the treatment Gowan was receiving. He stood by his Insight stories.”

What happened to Brofiscin Quarry? As reported by The Guardian in 2015

“By 2011, officials had concluded that the leaking of dangerous toxins from the corroding waste containers buried underground had the potential to pose a **significant health risk to local residents** and members of the public using a nearby footpath.¹⁶⁷ That same year, officials at the Environment Agency in Wales said that Monsanto, BP and Veolia were **liable for the contamination** and should pay the cost of cleaning up the site. All three companies refused to accept liability for the pollution, forcing the authorities that feared an expensive legal battle, to foot the £1.25m bill for the works, completed in 2012. Officials said at the time they would continue to attempt to recover the costs. Now, three years later, Natural Resources Wales, which took over the role of Environment Agency Wales in 2013, confirmed that they had finally come to an agreement with Monsanto, BP and Veolia to cover the cleanup bill. However, all three continue to deny liability, and the value of the settlement has not been disclosed.”

Compensation from industry for Alabama but not for Wales

Alabama is more than 50 million square miles: Wales is 8,000 square miles. Even though Monsanto and Solutia had to pay \$700 million compensation to residents in 2003 in Anniston, Alabama,¹⁶⁸ they escaped paying compensation to residents in Wales.¹⁶⁹

¹⁶⁵ <https://theecologist.org/2007/oct/11/burying-truth-orginal-ecologist-investigation-monsanto-and-brofiscin-quarry>

¹⁶⁶ <https://www.theguardian.com/science/2006/dec/08/smoking.frontpagenews>

¹⁶⁷ http://www.theguardian.com/environment/2015/jul/14/monsanto-bp-veolia-agree-to-pay-for-cleanup-contaminated-welsh-quarry-site?CMP=share_btn_link

¹⁶⁸ <http://www.nytimes.com/2003/08/21/business/700-million-settlement-in-alabama-pcb-lawsuit.html>

¹⁶⁹

http://www.theecologist.org/The_Brofiscin_Monsanto_Files/777777/burying_the_truth_the_orginal_ecologis_t_investigation_into_monsanto_and_brofiscin_quarry.html

Theo Colborn's crucial research in the early 1990s into the chemicals that were changing humans and the environment was ignored

The late Theo Colborn¹⁷⁰ (1927-1914) was the first to research and write about Endocrine Disrupting Chemicals (EDCs), man-made chemicals that became widespread in the environment after WW II. In a book published in 1996, *The Pesticide Conspiracy*, Colborn, Dumanoski and Peters revealed the full horror of what was happening to the world as a result of contamination with EDCs. There was emerging scientific research about how a wide range of man-made chemicals disrupt delicate hormone systems in humans. These systems play a critical role in processes ranging from human sexual development to behaviour, intelligence, and the functioning of the immune system. At that stage, polychlorinated biphenyls (PCBs), pesticides DDT, chlordane, lindane, aldrin, dieldrin, endrin, toxaphene, heptachlor, dioxin, atrazine and dacthal were shown to be EDCs. Colborn illustrates the problem by constructing a diagram (page 105) of the journey of a PCB molecule from a factory in Alabama into a polar bear in the Arctic. Colborn says: *"The concentration of persistent chemicals can be magnified millions of times as they travel to the ends of the earth...Many chemicals that threaten the next generation have found their way into our bodies. There is no safe, uncontaminated place."*

EDCs interfere with delicate hormone systems in sexual development

PCBs travel into the testes and sperm of male polar bears and make them infertile.¹⁷¹ Atrazine makes 1 to 5 out of 10 male frogs unable to reproduce because they lack testosterone controls including sperm.¹⁷² Is that what Colborn predicted would happen to humans who are confused about their gender or sex?

CONTAMINATION: The results of WWF-UK's Bio-monitoring Survey November 2003¹⁷³

On the second page there was a picture of a baby superimposed by a challenge: WHO CARES WHERE THE CHEMICALS END UP? This was an advertisement that appeared in the media in 2002. There was a courageous and defiant statement from the 'old, caring' WWF-UK: *"This advertisement appeared in the media in 2002 but was banned by the Advertising Standards Authority (ASA), even though it agreed with WWF that man-made chemicals are causing widespread contamination of humans and wildlife. Chemical industry lobby groups had complained that the advertisement overstated the risk of chemicals to human health. WWF is perturbed that, by asking the ASA to ban this advertisement, the chemical lobby has managed to influence what the public is allowed to know about chemical contamination. The lobby is now attempting to weaken the proposed EU chemical legislation that, as a result, could end up providing no additional public protection."*

The ASA rejected all complaints relating to the scientific and technical content of the advertisement. Industry representatives disputed whether:

- *more than 300 man-made chemicals are present in human bodies;*
- *all these chemicals are present in the foetus;*
- *man-made chemicals are more dangerous than naturally-occurring ones;*
- *presence of these chemicals is dangerous even at low levels;*
- *pollutants are found in intensively farmed food; and*
- *man-made chemicals are linked to birth defects in humans.*

The ASA found WWF's scientific research to be above reproach on all fronts and rejected every technical complaint. But despite being ruled factually accurate and being in the public interest, the advertisement was nevertheless banned on the grounds that it was 'unduly alarming'.

¹⁷⁰ <http://endocrinedisruption.org/about-tedx/theo-colborn>

¹⁷¹ <http://www.smithsonianmag.com/science-nature/polar-bears-may-be-suffering-lingering-impacts-pollutants-banned-nearly-40-years-ago-180961276/>

¹⁷² <https://www.sciencedaily.com/releases/2010/03/100301151927.htm>

¹⁷³ <http://www.wwf.org.uk/filelibrary/pdf/biomonitoringresults.pdf>

Executive summary

WWF visited 13 locations in England, Northern Ireland, Scotland and Wales in the summer of 2003 and took blood samples from 155 volunteers. Lancaster University analysed the samples for 78 chemicals: 12 organo-chlorine pesticides (including DDT and lindane), 45 PCB congeners and 21 polybrominated diphenyl ethers (PBDE) flame retardants, including those found in the commercially traded penta-, octa- and deca-BDEs.

WWF believes that this survey provides the first data on the concentrations of PCBs, organo-chlorine pesticides and PBDEs in the UK population's blood serum. Further, these results form the most comprehensive and largest data-set of organo-halogen chemical concentrations in humans in the UK in the last 10 years at least. In addition, the survey is the first that tries to link findings of chemical contamination to people's lifestyles.

FINDINGS

- Every person tested is contaminated by a cocktail of known highly toxic chemicals which were banned from use in the UK during the 1970s and which continue to pose unknown health risks.
- We found 70 (90 per cent) of the 78 chemicals we looked for in the survey. The highest number of chemicals found in any one person was 49 - nearly two thirds (63 per cent) of the chemicals looked for.
- Every person is contaminated by chemicals from each group: organochlorine pesticides, PCBs and PBDEs (flame retardants).
- The highest concentration of any chemical found was 2,557 ng/g (ng/g = parts per billion) of the DDT metabolite *p,p'*-DDE. The use of DDT was banned in the UK more than 20 years ago.
- The most frequently detected chemicals were PCB congeners 99 and 118 and the DDT metabolite *p,p'*-DDE, which were detected in all but one of the 155 volunteers.
- Ten chemicals were found in more than 95 per cent of volunteers (PCB congeners 99, 118, 138, 153, 156, 170, 180, 194, PBDE 153 and the organochlorine pesticides --HCH and *p,p'*-DDE).
- This is the first survey to identify the widespread contamination of non-occupationally exposed people to the deca-BDE brominated flame-retardant product. Worryingly, the highest levels found in our non-occupationally exposed volunteers were very similar to those observed in Sweden of people occupationally exposed to deca-BDE.
- We are being contaminated daily by 'unregulated' chemicals of unknown toxicity, such as the deca-BDE flame retardant. Since there is a dearth of knowledge on the levels of brominated flame-retardants in the UK population, it is not possible to determine any trend in contaminant levels.
- PCB contamination is gradually decreasing from levels found in the UK 10 years ago - which indicates that strong regulations work.
- Small numbers of people continue to be exposed and contaminated with high levels of certain chemicals, although median levels of some chemicals are decreasing compared with some earlier studies.
- Volunteers tested in Nottingham had the highest median level of total chemical contamination of the chemicals we looked for. They also had the highest median level of PCBs, organo-chlorine pesticides and of DDT and its metabolites. Further regional findings are presented in Appendix 1.
- The lifestyle questionnaire identified two factors which significantly affected the level of contamination of individual chemicals: older people have higher levels of PCBs in their blood; and women have lower levels of certain PCBs than men and the levels appear to reduce in relation to the number of children they carried and breast-fed. These differences seem to be related to women "off-loading" some of their chemical burden to their children."

When did WWF-UK change? Could it have been with the appointment of Robert Napier as Chief Executive Officer in 2004?

“Napier had spent most of his career working for environmental despoilers, took over the running the UK arm of the Worldwide Fund for Nature (WWF).¹⁷⁴ It was a surprising choice. *'It's like putting King Herod in charge of a crèche,'* said one commentator. But with the corporate world becoming ever more sophisticated in its relations with the environmental movement, the fund wanted someone who could talk on level terms with the City.”

PandaLeaks: The dark side of WWF: The description of the book and the author.¹⁷⁵

“The WWF, renowned global nature conservancy brand, *greenwashes* the ecological crimes of corporations currently destroying the last remaining rain forests and natural habitats on earth; and it accepts their money. This business model of the famous “eco” organization does more to harm nature than to protect it. The WWF cannot refute the facts gathered by esteemed journalist and filmmaker Wilfried Huisman during his two-year research expedition to all corners of the *green empire*. A journalistic tour-de-force unearthing the grim secrets behind the warm and cuddly façade of the WWF, Huisman’s exposé went straight to the German bestseller list. The book is now available in English, unabridged and updated.

Huisman also dug deep into the early history of the world’s most powerful nature conservancy organization and found several skeletons in the closet: the elite secret club known as “The 1001” and a private military commando unit deployed in Africa against big game poachers – *and* against black African liberation movements. In the name of environmental protection, the WWF has participated in the displacement and cultural extinction of indigenous peoples the world over.”

“It paints the picture of an environmental organization rubbing elbows with industry; doing deals with the rich and powerful, the oil companies and GMO mafia, forgetting its goals and even losing its identity in the process.”

Review by –Süddeutsche Zeitung-: This South German newspaper, founded in 1945, published in Munich, Bavaria, it is the largest German national subscription daily newspaper. The newspaper in conjunction with the [International Consortium of Investigative Journalists](#) reviewed the data from the Panama Papers for over a year before publishing it on 3 April 2016. Unlike the UK media, it is independent from government and not controlled by Media Corporations.

In May 2016 Monsanto lost a lawsuit for the first time against people claiming their cancers had been caused by polychlorinated biphenyls (PCBs)

Monsanto was finally found guilty of gross negligence by selling poisonous PCBs (which they had been manufacturing since 1930) to members of the public, some of who died as a result.¹⁷⁶

The agrochemical and agricultural biotechnology giant was forced to pay a total of \$46 million in damages to plaintiffs in the case. A St. Louis jury voted 10-2 in finding Monsanto, Pfizer, Solutia, and Pharmacia guilty in the selling of polychlorinated biphenyls, or PCBs, after the compound had been banned. One Monsanto document dated September 20, 1955 reported by EcoWatch stated: *“We know Aroclors [PCBs] are toxic but the actual limit has not been precisely defined,”* Plaintiffs in this case — three of nearly 100 involved in litigation, some of whom died — said they developed non-Hodgkin lymphoma from exposure to PCBs. *“This is the future,”* plaintiff’s attorney Steven Kherkher told EcoWatch, explaining his law firm had to ‘pool resources’ to initiate the lawsuit. *“The only reason why this victory is rare is because no one has had the money to fight Monsanto.”* However, he added, mentioning his firm has around 1,000 plaintiffs surrounding PCBs, *“It’s not going to be rare anymore.”* Kherkher also explained as more cases against the company come to court, *“every judge allows us to acquire more and more information from Monsanto and discover their documents. There is a lot more information out there yet to be mined.”*

Exposure of emails from 1969 in which executives hand wrote notes at the end were revealing of the mindset of corporations where profits take precedence over human health and the environment:

¹⁷⁴ <https://www.theguardian.com/environment/2004/jan/11/business.conservationandendangeredspecies>

¹⁷⁵ <http://www.pandaleaks.org>

¹⁷⁶ <http://yournewswire.com/monsanto-loses-lawsuit-pays-46-million-to-poisoned-victims/>

“Subject is snowballing where do we go from here? Alternatives; Go out of business? Sell the hell out of them as long as we can and do nothing else? What do we tell our customers? The Big Question!”

Monsanto has been bought up by Bayer so the Monsanto name has disappeared. Where are the former Monsanto Executives hiding?

What happened to Solutia? Allegedly it filed for bankruptcy in 2003, but emerged again in 2008 to sell the company

In 2007 *The Ecologist* had reported: “To date, the latest investigation into Brofiscin has cost £800,000. Any remediation is estimated at £100m. This figure could be dwarfed by associated civil actions relating to public health and planning. Monsanto has paid out approaching \$1 billion to cover the ongoing cost of remediation at Anniston and settle civil claims by victims of the pollution, and more cases are outstanding.

Solutia Inc. will escape this outcome, as will Monsanto, if they can keep Gowan out of court – as without him there to be cross-examined, his witness statements become largely worthless.”

Solutia was formed on September 1, 1997, as a **divestiture** of the **Monsanto Company** chemical business. Solutia filed for **bankruptcy** on December 17, 2003, in response to significant litigation surrounding various products, unsustainable debt structure, and a downturn in the economy but emerged from bankruptcy on February 28, 2008.

What happened to the Newport factory?

In July 2012 the company (Solutia) was acquired by the **Eastman Chemical Company**.

Report in South Wales Argus 26/04/2013: ¹⁷⁷ “More than 200 Newport jobs have been secured after the Welsh Government gave a £4.1 million grant to an American chemical company following a potential threat to move most of the posts overseas. Eastman is to invest tens of millions of pounds into a new plant at what is known as the Solutia site in Lliswerry. The Newport site beat off competition from three rival locations in the US and Malaysia and was helped by a £4.1 million grant from the Welsh Government. “Without Welsh Government support, the sources said, Solutia considered locating the project at a competing plant in Alabama, United States. Eastman is an international player. The fact that it is investing further in Newport is a major vote of confidence for the city.”

Alabama: that’s a familiar name with regard to PCBs and Monsanto

Alabama is more than 50 million square miles: Wales is 8,000 square miles.

Eastman Chemical Company Board of Directors

There are also some well-known names on the Eastman Management Board.¹⁷⁸

Brett D. Begemann (Director since February 2011) Mr. Begemann has been President and Chief Operating Officer of Monsanto Company, a leading global provider of technology-based solutions and agricultural products that improve farm productivity and food quality, since October 2013, with responsibility for Monsanto’s worldwide sales and operations, corporate affairs, and global business organization. Other Directors of Eastman Chemical Company are: from Dow Chemicals, Dow Corning, General Mills, leading producer of packaged consumer goods and Cargill *Inc.*, an agricultural trading and processing company. **What is going on at the Eastman site?**

¹⁷⁷

http://www.southwalesargus.co.uk/news/10382004_4m_grant_helps_secure_more_than_200_Newport_jobs/

¹⁷⁸ http://www.eastman.com/Company/About_Eastman/Leadership/Pages/BoardofDirectors.aspx

The UK Health and Safety Executive gave the Newport site a clean bill of health¹⁷⁹

*“Safeguarding the environment. In the past, PCB, PCP, and chlorine were manufactured on site. These historical activities left a legacy of these substances at the site. Consultants completed a comprehensive risk assessment in 1992, to determine if these activities had resulted in any unacceptable risks. **This assessment concluded that the site was stable and did not pose a threat to health or to the environment as defined in the Contaminated Land Regulations.** Since that time, we have replaced underground drains and ‘capped’ areas in a phased manner to reduce movement of these legacy substances. The monitoring and management of the site continues. Residual legacy substances in the soil contribute to legacy substances in wastewater discharges from the site via site drains.”*

Explosion at Eastman’s Kingsport Factory US in October 2017

An explosion occurred at Eastman’s Kingsport Factory, Tennessee on October 4th 2017¹⁸⁰ that necessitated highway closures and evacuation of personnel. The Newport site is in a built-up area and is surrounded by houses. Does the Health and Safety Executive consider that to be safe?

Syngenta’s factory in Huddersfield UK makes the toxic herbicide paraquat for export¹⁸¹

In 2014 there was an accident at the Syngenta factory in Huddersfield that manufactures paraquat, an herbicide banned in the EU. ‘Syngenta has exported 122,831 tonnes of paraquat from the UK since 2015, an average of 41,000 tonnes a year, according to export licensing data analysed by the Swiss NGO Public Eye and shared with the Guardian. Since 2015, when a facility in Belgium stopped exporting paraquat, all EU exports of the pesticide have come from Syngenta’s UK base, according to Public Eye.’ **Just like PCBs!** A highly toxic weedkiller not authorised for use in the EU is being exported to developing countries from a UK factory. Paraquat, a pesticide so lethal that a single sip can be fatal, has caused thousands of accidental deaths and suicides globally, and was outlawed by EU states in 2007. But Swiss pesticide manufacturer Syngenta is exporting thousands of tonnes of the substance to other parts of the world from an industrial plant in Huddersfield. Campaigners have condemned the practice as an “astonishing double standard”, while a UN expert said it was deeply disquieting that the human rights implications of producing a substance for export that is not authorised in the EU were being ignored. “The fact that the EU has decided to ban the pesticide for health and environmental reasons, but they still export it to countries with far weaker regulation and far weaker controls, is shocking to me,” said Baskut Tuncak, the UN special rapporteur on toxic wastes. Syngenta is responsible for 95% of Europe’s exports of paraquat, which it sells under the brand name Gramoxone. The substance can be absorbed through the skin and has been linked with Parkinson’s disease.

Another chemical company in Wales, close to Cardiff

Dow Corning’s site at Barry in the UK is one of the company’s largest manufacturing facilities. Dow Corning is an American multinational corporation headquartered in Midland, Michigan, United States. Originally established as a joint venture between the Dow Chemical Company and Corning Incorporated. Silicone production started in Barry in 1952, initially by Midland Silicones and then Dow Corning in 1971. Continued investment throughout the decades has made the Barry site one of the most advanced facilities in the world for the production of silicon-based materials. Today the site’s 500 plus employees manufacture and distribute high quality silicon-based materials to

¹⁷⁹ http://www.eastman.com/Company/Worldwide/our_sites/Documents/Newport_HSE_Review.pdf

¹⁸⁰ <http://www.wcyb.com/news/tennessee/kingsport/explosionat-eastmanchemicalcoin-kingsport/631289601>

¹⁸¹ <https://www.theguardian.com/global-development/2017/aug/22/uk-condemned-shocking-export-deadly-weedkiller-poorer-countries-paraquat>

customers in Europe and other parts of the world. Silicone **fluids, rubber** and specialty polymers made in Barry are used in a wide variety of applications, from cosmetics to car airbag coatings and construction sealants. Over the decades Dow Corning's site at Barry has gained multiple awards that reflect a focus on excellence in **health and safety**, employment and **corporate social responsibility** practices.

Dow: excellence in Health and Safety and Corporate Social Responsibility? What about the Bhopal gas leak and explosion in Madhya Pradesh, India in 1984?

The Bhopal disaster occurred in 1984 and is described as "*The worst industrial disaster*" to take place ever. "*A few hours past midnight on Dec. 3, 1984, an accident occurred at a Union Carbide Corp. (UCC) pesticide plant in Bhopal in central India that left much of the city covered in a blanket of sickness and death.*"¹⁸² *Water leaked into a tank containing highly volatile chemicals, setting off a massive exothermic reaction that could not be contained. Dozens of metric tons of lethal gas were expelled into the night. This chemical cloud, which contained a form of cyanide, was soon blown southeast over residential areas. By morning, the dead and barely living filled the city's streets, hospitals and makeshift morgues. Thousands were killed, and nobody knew why.*

*Yet worse was to follow. In the three decades since the incident, up to 25,000 people have died, and over 500,000 have suffered a variety of ailments — cancer, tuberculosis and birth defects, among others — that stem directly from the effects of the leak. This painful aftermath has been met by indifference by the plant's former proprietors, the UCC, and its present parent company, the Dow Chemical Company. Both these U.S.-based multinationals continue to resist outstanding litigation claims, insisting that the cause of the leak was **employee sabotage**. Today Dow is engaged in a legal standoff with the government of India over paying restitution for environmental damages in Bhopal and is refusing to even clean up the site of the plant, which is **still leaking** highly toxic substances into the local water system. Just last year, Dow brought in over \$50 billion in revenue, and yet it continues to deny liability when victims in Bhopal ask for basic assistance.*

Even 30 years on, children are born with horrific deformities caused by the effects of the chemicals lingering around the rusting plant. Others fall sick because they have no choice but to drink poisonous water from wells contaminated by toxic chemicals from the disaster."

Wales is the site of the 'worst environmental disaster' that the public has never heard of because there was a massive cover up for more than 40 years

The continual leak of Monsanto's toxic chemicals will carry on for many years from Brofiscin Quarry, Maendy Quarry or one of the other five quarries around Wales in which toxic chemical waste was carried in the past by lorries bearing IWD/Purle and Monsanto logos.

Douglas Gowan had to have police protection until his Report was 'lost' and the danger of an Inquiry into Brofiscin Quarry was over but he was left with long-term effects of PCBs

*"Gowan has high levels of PCB in his blood – 30 times above the average – and suffers immune system suppression and muscular seizures that immobilise him. He is registered disabled. He told *The Ecologist* (2007) that he was recently threatened by telephone with having his benefits stopped if he continued to speak out. His unwelcome caller claimed to be representing the Treasury and Environment Agency".*

Douglas Gowan was buried on 4 May 2018

'Thus, ended his tireless quest to ensure the worldwide public were made fully aware of what exactly had transpired, and the lasting toxic legacy, with the Monsanto Corporation and PCBs'

The Learning and Work Institute's Annual Raymond Williams Memorial Lecture was presented by the Actor and Campaigner, Michael Sheen. The event was organised in partnership with The Open

¹⁸² <http://america.aljazeera.com/opinions/2014/12/dow-chemical-mustfinallyhelpthebhopaldisastervictims.html>

University in Wales and took place on the 16th November, 2017 in Cardiff. **Who speaks for Wales?**¹⁸³ At 1.26.10 Michael Sheen talked about Douglas Gowan/Monsanto/PCBs. Doug is not forgotten.

The global legacy of aspartame, Monsanto's neurotoxic sweetener

Why Monsanto chose Britain to be the Rapporteur Member State with backup from EFSA

Aspartame was first synthesised in 1965 in the US. It is an addictive, excite-neurotoxic, carcinogenic, genetically engineered drug and adjuvant that damages the mitochondria and interacts with drugs and vaccines. For the first 16 years the FDA banned it. Aspartame was shown by FDA scientists to cause brain tumours, epilepsy and neurotoxic effects. However, the CEO of Searle that manufactured aspartame was a man called Donald Rumsfeld. He and President Ronald Reagan (a man famed for his deregulation of the US EPA) between them managed to get it passed for use in a wide number of fizzy diet drinks in 1982. It has been approved for use in Britain since then. In 1985 (when Monsanto purchased Searle, that held the patent to aspartame) the late FDA toxicologist, Dr Adrian Gross, confirmed to congress that it was highly neurotoxic (1985, Senate) and that aspartame violated the Delaney Amendment because it caused brain tumors and brain cancer.¹⁸⁴ Many independent researchers have confirmed its dangers but industry studies say it is safe.

In 2007 a Review was published in *Nature*: Direct and indirect cellular effects of aspartame on the brain.¹⁸⁵ *"Aspartame is composed of phenylalanine (50%), aspartic acid (40%) and methanol (10%). Phenylalanine plays an important role in neurotransmitter regulation, whereas aspartic acid is also thought to play a role as an excitatory neurotransmitter in the central nervous system. Glutamate, asparagines and glutamine are formed from their precursor, aspartic acid. Methanol, which forms 10% of the broken-down product, is converted in the body to formate, which can either be excreted or can give rise to formaldehyde, diketopiperazine (a carcinogen) and a number of other highly toxic derivatives."*

The UK is the Rapporteur Member State for aspartame Monsanto's controversial sweetener. EC rules specify that the RMS be chosen by Industry.¹⁸⁶ It appears that the Committee on Toxicity of Chemicals in foods (CoT) had only consulted industry literature, since they have allowed aspartame to be approved since 1982.

Professor David Coggon was Chairman at the time of the latest reassessment of aspartame.

*"At its meeting on 29 October 2013, the Committee on Toxicity of Chemicals in foods (CoT) discussed a paper, describing results from a study led by scientists at Hull York Medical School." ... CoT POSITION PAPER ON A DOUBLE BLIND RANDOMIZED CROSSOVER STUDY OF ASPARTAME.*¹⁸⁷ No one is allowed to see this study until it has been accepted for publication in a peer-reviewed journal.

"The Committee judged the delay acceptable since the results presented did not indicate any need for action to protect the health of the public." EFSA has also re-evaluated the safety of aspartame.¹⁸⁸ As a result, it concluded in December 2013 that *'aspartame and its breakdown products are safe for human consumption at current levels of exposure'*.

Independent scientist Erik Millstone¹⁸⁹ Professor in Science & Technology Policy, Sussex University sent a 67-page detailed response to the Head of EFSA 'Food Ingredients and Packaging' Unit and the

¹⁸³ <https://www.youtube.com/watch?v=bbVdA7zS8dE>

¹⁸⁴ <http://www.mpwhi.com/main.htm>

¹⁸⁵ <http://www.nature.com/ejcn/journal/v62/n4/full/1602866a.html>

¹⁸⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009R1107>

¹⁸⁷ <http://cot.food.gov.uk/pdfs/cotposponaspar.pdf>

¹⁸⁸ <http://www.food.gov.uk/news-updates/news/2013/dec/efsa-aspartame#.UuAtV3xFDcs>

¹⁸⁹ Professor of Science Policy at the University of Sussex

Senior Scientific Officer.¹⁹⁰ He strongly disputed their re-assessment. EFSA ignored his response, just as the US EPA ignored evidence from Dr Betty Martini and Dr John Olney.¹⁹¹

Newly leaked emails from John Podesta (Chairman of Hillary Clinton's presidential campaign) discuss Rumsfeld's involvement in aspartame approval¹⁹²

"John Podesta's leaked emails have turned up a number of damning pieces confirming the collusion between the soda industry and high-level officials within the U.S. government, including Hillary Clinton. In a recent batch of leaked emails, Donald Rumsfeld's involvement in the approval of aspartame is discussed. Rumsfeld served as White House chief of staff from 1974 to 1975. He was also secretary of defense from 1975 to 1977, and again from 2001 to 2006.

Why are vaccinations made compulsory for children when severe side effects are known about, but are concealed from the public?

Dr Andrew Wakefield and Prof John Walker-Smith were struck off the GMC Register

In 1998 the *Lancet* published a case series on twelve children receiving treatment for bowel dysfunction at the Royal Free Hospital in London. The paper called for further study of a possible association between bowel disease and developmental delay, including cases of autism. It also noted that eight of the children's gastrointestinal and autistic symptoms began shortly after they received the MMR vaccination. There was a vigorous media and medical campaign to suggest that the paper was fraudulent and there were conflicts of interest. It was retracted from the *Lancet*. In 2010 at a GMC hearing, two of the authors Dr Andrew Wakefield and Prof John Walker-Smith, an eminent paediatric gastroenterologist, were struck off the Medical Register and Wakefield left for the US.

In 2012 the GMC's determination was quashed by an appeal judge

In 2012 Prof John Walker-Smith appealed and Justice John Mitting ruled on the appeal by Walker-Smith, saying that the GMC "*panel's determination cannot stand. I therefore quash it.*"¹⁹³ He said that its conclusions were based on "*inadequate and superficial reasoning and, in a number of instances, a wrong conclusion.*" The verdict restored Walker-Smith's name to the medical register and his reputation to the medical community. However, he had retired in 2001.¹⁹⁴ It was reported in the *Independent*, the *Mirror* and the *Evening Standard*, but not in the *Times*, the *Sunday Times*, the *Guardian* or the *Observer*. Were government agencies and the press (Brian Deer in *The Sunday Times*) protecting the interests of Merck and GlaxoSmithKline? In fact, Brian Deer claimed to be a journalist writing for the *Sunday Times*, but the *Sunday Times* subsequently wrote a disclaimer. One of the parents of the 12 children asked Brian Deer how he managed to obtain the precise clinical details of her son. She also asked him who financed him for attending the whole of the GMC trial. He declined to answer both of these questions.

Big food, big pharma: is science for sale? Re: the UK decision to fund the new Bexsero vaccine¹⁹⁵

Elizabeth Loder, acting head of research at the *BMJ*. "*We have grown accustomed to allegations of conflicts of interest, biased research, and manipulative marketing on the part of the drug industry. Sadly, this is not the only area where there is reason to be concerned about corporate influences on public policy. Crowcroft and colleagues examine the controversy over the UK government decision on*

¹⁹⁰ http://sro.sussex.ac.uk/43821/1/EM_Letter_to_EFSA_on_Aspartame_22Feb2013.pdf

¹⁹¹ <http://www.scribd.com/doc/6669992/Dr-John-Olney-Statement-Aspartame-1987> Dr. John Olney's letter to the Senate in 1987.

¹⁹² <http://articles.mercola.com/sites/articles/archive/2016/11/09/podesta-aspartame-dangers.aspx>

¹⁹³ <http://healthimpactnews.com/2012/british-court-throws-out-conviction-of-autismvaccine-md-andrew-wakefields-co-author-completely-exonerated/>

¹⁹⁴ http://www.naturalnews.com/034629_Andrew_Wakefield_BMJ_Brian_Deer.html

¹⁹⁵ <http://www.bmj.com/content/350/bmj.h795>

*public funding for a new vaccine (Bexsero) for meningococcal disease.*¹⁹⁶ *The problems they outline are all too familiar: "lobbying may have influenced the alteration" of the original decision. Links between some "vocal clinicians" and the drug industry were not disclosed. The lack of transparency makes it unsurprising that "conspiracy theories emerged, including the idea of undue influence of industry." Crowcroft et al had said: "Controversy about the evidence, economics, ethics, lobbying, and decision making surrounding a new vaccine for serogroup B meningococcal disease should trigger change in the way we develop recommendations for new vaccine."*

Are vaccinations safe? Bexsero Leaflet versus JCVI schedule: letter to the Editor BMJ¹⁹⁷

Leaflet for Bexsero vaccine for meningococcal disease: "Overall, in clinical studies, among 3,058 participants aged 10 through 25 years who received at least 1 dose of BEXSERO, 66 (2.1%) participants reported serious adverse events at any time during the study. In the 3 controlled studies 1,2,3 (BEXSERO n = 2,716, control n = 2,078), serious adverse events within 30 days after any dose were reported in 23 (0.8%) participants receiving BEXSERO and 10 (0.5%) control recipients."
*In the UK - according to the JCVI recommended schedule - Bexsero is not administered between the ages of 10 and 25 years but at 8 weeks, 16 weeks and 1 year, with a multitude of other vaccines. At 8 weeks, for example, a child receives all in one go Bexsero, Infanrix Hexa (DTaP+polio+HiB+Hep B), 13 strain pneumococcal and rotavirus vaccines. I wonder what advice GPs and A&E doctors are given for dealing with any reactions, and **what long term studies exist showing this is safe?***

In 2010 GSK Pandemrix vaccine was recommended for swine flu, yet it was untested

*Narcolepsy was a rare complication: why did the Government underwrite it so the taxpayer had to pay the bill? "Reports indicate that dozens of Pandemrix victims from the UK will be awarded about \$1.5 million each in British pounds for permanent health damage caused by GSK's Pandemrix vaccine."¹⁹⁸ One in 16,000 people who took the vaccine, it turns out, are said to have developed narcolepsy and/or cataplexy, two neurological diseases that disrupt normal sleep patterns and muscle function. But rather than be held responsible, GSK is actually billing the UK government the equivalent of about \$92 million to pay for damages, which means taxpayers are footing the bill. The Work and Pensions Department (WPD) would only pay out for 60% disability." The WPD refused to pay until a [major study](#) of four- to 18-year-olds by the [Health Protection Agency](#) found that around one in every 55,000 vaccinations was associated with narcolepsy. The conclusion of the BMJ article was that: *The increased risk of narcolepsy after vaccination with AS03 adjuvanted pandemic A/H1N1 2009 vaccine indicates a causal association, consistent with findings from Finland. Because of variable delay in diagnosis, however, the risk might be overestimated by more rapid referral of vaccinated children.*¹⁹⁹ GlaxoSmithKline denied that Pandemrix was responsible for narcolepsy.*

Pandemrix vaccine: why was the public not told of early warning signs? Lawsuits show GSK knew
"Now, eight years after is emerging from one of the lawsuits that, months before the narcolepsy cases were reported, the manufacturer and public health officials were aware of other serious adverse events logged in relation to Pandemrix."²⁰⁰ Over 1300 people are estimated to have been affected among the roughly 30 million vaccinated across Europe including around 100 families in the UK. For a range of concerning adverse events, reports were coming in for Pandemrix at a consistently higher rate than for the other two GSK pandemic vaccines—four times the rate of facial palsy, eight times the rate of serious adverse events, nine times the rate of convulsions. Overall, Pandemrix had, proportionally, five times more adverse events reported than Arepanrix and the unadjuvanted vaccine.

¹⁹⁶ <http://www.bmj.com/content/350/bmj.h308>

¹⁹⁷ <https://www.bmj.com/content/362/bmj.k3948/rr>

¹⁹⁸ http://www.naturalnews.com/050767_swine_flu_vaccine_GlaxoSmithKline_Pandemrix.html

¹⁹⁹ <http://www.bmj.com/content/346/bmj.f794#aff-3>

²⁰⁰ <https://www.bmj.com/content/362/bmj.k3948>

In Germany, senior physicians expressed doubts about GlaxoSmithKline's Pandemrix vaccine. They were concerned about potential side effects triggered by the AS03 adjuvant, an oil-in-water emulsion that it contained to boost effectiveness. Then controversy erupted when the German newspaper Der Spiegel reported that top politicians and government employees were going to receive Celvapan, Baxter's unadjuvanted H1N1 vaccine, not Pandemrix.

The author said: *What is the purpose of pharmacovigilance if nobody is acting on the information?*

This information took eight years to come to light through academic work and litigation. Is this acceptable? If the information at our disposal is partial, that is the direct consequence of secrecy, which should not surround any public health intervention. With prominent organisations in the UK, including the Department of Health, British Medical Association, and Royal Colleges of General Practitioners, working hard to convince a reluctant NHS workforce to get vaccinated. "We fully support the swine flu vaccination programme ... The vaccine has been thoroughly tested," they declared in a joint statement. Except, it hadn't.

Clare Daly, a member of the Irish parliament, called the adverse events after Pandemrix a "completely avoidable catastrophe," and has been demanding answers for over a year. "The Health Service Executive (HSE) decided to purchase Pandemrix and continued to distribute it even after they knew it was dangerous and untested, and before most of the public in Ireland received it. Given that it was in possession of that knowledge, why did it continue to administer the least safe vaccine? Was it cheaper? Did the government have a deal with GSK in return for jobs?"

She cited the case of a 14-year-old boy with narcolepsy and added, "The HSE and the State Claims Agency went into the High Court last week, unnoticed and undocumented, to obstruct this boy and people like him who are seeking documents under discovery."

In March 2018 Patrick Vallance FRS started as Chief Scientific Advisor (CSA) to the UK Government

In 2017 Patrick Vallance, President of GlaxoSmithKline Research and Development, was elected to the Royal Society as a preliminary to being appointed as CSA to the UK Government. Vallance said leaving GSK had been a 'difficult decision', but added: 'I am hugely excited about this opportunity to serve the UK government at a time when science has never been more important to the UK's economy and future.'²⁰¹

Dr Leemon McHenry (California State University, Northridge) has written on how the pharmaceutical industry manipulates studies and gets away with fraud.²⁰² In this paper, reviewing three trials on psychiatric drugs (two on paroxetine and one on citalopram), he and his colleagues concluded that all industry-sponsored trials are suspect and should be treated as such. "Because so few gain public scrutiny and even fewer are even formally retracted it is important to make these articles transparent to correct the scientific record and protect patients from potential harm."

*The former Editor of the *New England Journal of Medicine* Marcia Angell reported in 2008 that "over the past two decades the pharmaceutical industry has gained unprecedented control over its own products. Drug companies now finance most clinical research over prescription drugs and there is mounting evidence they often skew the research they sponsor to make their drugs look better and safer."²⁰³*

In 2014 China fined the British pharmaceuticals giant GlaxoSmithKline \$488.8 million (3 billion Yuan) for a "massive bribery network" to get doctors and hospitals to use its products.²⁰⁴

²⁰¹ <https://www.chemistryworld.com/news/patrick-vallance-named-as-uks-next-chief-scientific-adviser/3008255.article>

²⁰² https://www.academia.edu/35773218/Industry-Corrupted_Psychiatric_Trials

²⁰³ <https://jamanetwork.com/journals/jama/article-abstract/182478?redirect=true>

²⁰⁴ <https://abcnews.go.com/International/glaxosmithkline-gsk-fined-4888-million-massive-bribery-network/story?id=25624684>

In 2016, GlaxoSmithKline (GSK) was fined £37.6m by the UK competition watchdog for paying drug makers in return for delaying cheaper generic versions of Seroxat.²⁰⁵

A review by the International Medical Council on Vaccination by Buttram & Frompovich.²⁰⁶

In particular there was a prospective study of premature infants vaccinated and followed for three days; abnormal elevation of C-Reactive Protein (CRP) level occurred in 85% of infants administered multiple vaccines and up to 70% of those given a single vaccine. Overall, 16% of infants had vaccine-associated cardiorespiratory events within 48 hours post-immunization.

Furthermore, the Pourcyrous Study noted that the DTaP vaccine was associated with the highest incidence of cardio-respiratory events in those infants given a single vaccine.²⁰⁷ They found that the adjuvants aluminium, oils (such as peanut oil) and bacterial products could be responsible for inflammation. During the Congressional Hearings on Vaccine Safety (1999-December 2004) an FDA panel was repeatedly asked, **“Where are your (safety) studies?”** The panel could only reply with unsatisfactory answers such as, *“They would be very expensive.”*

Are vaccines associated with autism?

A study published in the September 2014 volume of the *Journal of Public Health and Epidemiology* reveals a significant correlation between autism disorder (AD) and MMR, Varicella (chickenpox) and Hepatitis-A vaccines. Using statistical analysis and data from the US Government, UK, Denmark and Western Australia, scientists at Sound Choice Pharmaceutical Institute (SCPI) found that increases in autistic disorder correspond with the introduction of vaccines using human fetal cell lines and retroviral contaminants.²⁰⁸

Heavy load of aluminium in babies

In a conference in Canada in 2014, Neil Z. Miller came up with a disturbing figure for the aluminium load in babies: *“Thus, babies who follow the CDC immunization schedule are injected with nearly 5,000 micrograms (5 milligrams) of aluminium by 18 months of age,”... “Depending on their vaccine schedule, some babies may receive up to 1,475 micrograms of aluminium at their 12 or 15 month visit, which happens to be right around the age that most parents and doctors first notice the onset of autism symptoms.”*²⁰⁹

Vaccines and Aluminium

Prof Exley’s team from Keele University UK published two papers in 2017 about aluminium.

Aluminium in brain tissue in autism in which samples from 5 donors from the Oxford Brain Bank had aluminium levels measured. *“We have made the first measurements of aluminium in brain tissue in Autism Spectrum Disorder (ASD). We have shown that the brain aluminium content is extraordinarily high. We have identified aluminium in brain tissue as both extracellular and intracellular with the latter involving both neurones and non-neuronal cells. The presence of aluminium in inflammatory cells in the meninges, vasculature, grey and white matter is a standout observation and could implicate aluminium in the aetiology of ASD.”*²¹⁰

Aluminium in brain tissue in familial Alzheimer’s disease: *“The brain is a highly compartmentalized organ exceptionally susceptible to accumulation of metabolic errors. Alzheimer’s disease (AD) is the most prevalent neurodegenerative disease of the elderly and is characterized by regional specificity*

²⁰⁵ <https://www.theguardian.com/business/2016/feb/12/glaxosmithkline-fined-anti-competitive-behaviour-seroxat>

²⁰⁶ <http://www.vaccinationcouncil.org/2011/06/01/vaccines-and-brain-inflammation/>

²⁰⁷ [https://www.jpeds.com/article/S0022-3476\(07\)00185-0/abstract](https://www.jpeds.com/article/S0022-3476(07)00185-0/abstract)

²⁰⁸ <http://soundchoice.org/scpiJournalPubHealthEpidem092014.pdf>

²⁰⁹ http://www.whale.to/vaccine/Aluminum_in_Vaccines.pdf

²¹⁰ <https://www.sciencedirect.com/science/article/pii/S0946672X17308763>

of neural aberrations associated with higher cognitive functions. Aluminium (Al) is the most abundant neurotoxic metal on earth, widely bioavailable to humans and repeatedly shown to accumulate in AD-susceptible neuronal foci. Misconceptions about Al bioavailability may have misled scientists regarding the significance of Al in the pathogenesis of AD. The hypothesis that Al significantly contributes to AD is built upon very solid experimental evidence and should not be dismissed. Immediate steps should be taken to lessen human exposure to Al, which may be the single most aggravating and avoidable factor related to AD.”²¹¹

Prof Exley interviewed by Del Bigtree at an Autoimmunity Conference in 2018²¹²

Chris Exley had worked on inorganic aluminium for 26 years and managed to get grants. But 18 months ago, when they wrote their two papers on vaccines and aluminium, although he didn't read social media, people told him about death threats against him. Negative comments were made at the highest level in Keele (the Chancellor, Vice-Chancellor and Deans) because they had a Pharmaceutical Company on site. Merck had refused to let them have samples of Gardasil (a vaccine against human papilloma virus) which was unethical. Thus, Exley said, people should be given a choice about whether or not to have their children vaccinated, because of the collateral damage.

Cochrane Review on HPV vaccine was criticised by researchers from Sweden, Denmark and Oxford
Jørgensen L, Gøtzsche P, Jefferson T. The Cochrane HPV vaccine review was incomplete and ignored important evidence of bias. *BMJ Evid Based Med.* 2018 Jul 27.²¹³

A short but apposite extract from the paper: “*The Cochrane Collaboration aims to be free from conflicts of interest related to the manufacturers of the reviewed products.*²⁸ *Most of the 14 Cochrane authors on the first published protocol for the Cochrane review had major conflicts of interest related to the HPV vaccine manufacturers. The announcement of the Cochrane review on Cochrane.org under ‘News’ included a ‘UK Science Media Centre roundup of third-party expert reaction to this review’.* *Six experts were cited—all from the UK, although the Cochrane Collaboration is an international organisation. Two of the experts had financial conflicts of interest with the HPV vaccine manufacturers. A third expert was responsible for vaccinations in Public Health England (PHE) that promotes the HPV vaccines.”* **Richard Smith—the former editor of the British Medical Journal (BMJ)— described medical journals as an extension of the marketing arm of the drug industry.** *We are concerned that some observers may see Cochrane reviews in the same light when Cochrane publishes such public relation messages.”*

Controversy about the Cochrane Collaboration and HPV vaccination for girls: a ‘gift’ from the Bill & Melinda Gates Foundation to fund ‘project work’

The Cochrane Collaboration is considered to be the “gold standard” in scientific integrity, but they have come under fire recently for what appears to be biased reviews influenced by the pharmaceutical industry. They received a \$1.15 million “gift” from the Bill & Melinda Gates Foundation to fund “project work” from 2016 to 2017.²¹⁴

Cochrane board: The 13-member board of the prestigious medical-evidence group the Cochrane Collaboration has seen a slew of resignations. On 14 September 2018, board member Peter Gøtzsche said he had been expelled from the collaboration with no clear justification. Cochrane told *Nature* that it had received “numerous complaints” about Gøtzsche, after he co-authored a critique of the Cochrane’s review on the human papilloma virus vaccine. Four elected board

²¹¹ <https://www.ncbi.nlm.nih.gov/pubmed/21157018>

²¹² <https://www.youtube.com/watch?v=wB1DBzaoU-M&feature=youtu.be>

²¹³ <https://ebm.bmj.com/content/early/2018/07/27/bmjebm-2018-111012>

²¹⁴ <https://healthimpactnews.com/2018/gates-foundation-buys-cochrane-integrity-for-1-15-million-the-death-of-scientific-integrity/>

members quit in protest, requiring two appointed members to step down to maintain a mandated balance. The ructions came as the group had its annual meeting in Edinburgh, UK.²¹⁵

Health Impact News has covered the work of Dr. Gøtzsche frequently over the years, as he is an outspoken critic of Big Pharma, [referring to them as “organized crime.”](#) He is author of [the book](#), *Deadly Medicines and Organized Crime: How big pharma has corrupted healthcare*.

Joint Committee on Vaccination and Immunisation (JCVI) proposal to extend the HPV vaccination programme to adolescent boys

On 19/07/2018 the industry-sponsored UK Science Media Centre reported the expert reaction to the JCVI with Gardasil (at present in place for girls aged 11-13 as a prophylaxis against cervical cancer) to adolescent boys. They were mostly related to cost-effectiveness rather than to safety of the individual. The SMC announcement was immediately followed by a cluster of articles that contained remarkably similar (but totally inaccurate) information. *Guardian/Observer* journalists reminded readers in sensationalist terms about the so-called ‘disgraced anti-vaxx’ doctor, Dr Andrew Wakefield, the discovery that he was dating Australian supermodel Elle Macpherson and Trump’s ‘fake’ news.

In 2017, one *Guardian* journalist, presumably having been prompted to do so by the SMC in advance of his arrival, wrote a vicious and defamatory article: “Last week, [Andrew Wakefield](#), the most contemptible of the charlatans, arrived in Britain to exploit the false hopes and fill the nightmares of his native land. That he is a fraud has been established [beyond reasonable doubt](#). [The General Medical Council struck him off](#) in 2010 after, [in a superb example of journalism at its best](#), [Brian Deer](#) showed how Wakefield had manipulated research to make a non-existent link between the measles, mumps and rubella vaccine and autism. The one good thing Andrew Wakefield has done in his worthless life is show that sick societies are like sick people. They, too, face suffering without relief or prospect of a cure. They, too, are open to exploitation by every variety of crank and fanatic. Nowhere more so than in Trump’s America. Finally, ask yourself why Andrew Wakefield does not recant, when every study of autism and vaccination has shown his original claim to be false?”

Because it didn’t. One of the so-called ‘experts’ invited by the UK Science Media Centre had claimed that as a fact.

Professor Timothy Caulfield, Professor of Health Law and Science Policy from the University of Alberta, Canada (on the register of Canadian speakers as one who ‘debunks myths’), wrote in the *British Medical Journal* the following Saturday (Aug 4 to 11 2018) a *Personal View*²¹⁶ It was titled: [Elle Macpherson, “anti-vaxx” nonsense, and the opportunity to engage](#)

While preparing this piece I searched for “‘Elle Macpherson’ and ‘Andrew Wakefield’.” I got 1.5 million hits. Thankfully, some of the media reports included good, definitive information about the value and safety of vaccination. But others simply repeated Wakefield’s discredited ideas.

[Who provided the picture accompanying the article?](#) “Discredited doctor Andrew Wakefield with model Elle Macpherson.” It is vaguely pornographic. The couple are photographed out shopping; he is holding her left arm and she has her hand resting across his lower body and on his right thigh, in a possessive manner. This salacious gossip could have been printed in *Hello!* magazine, the *Sun* or the *Daily Mail*, but not the *British Medical Journal*. I told the Editor-in-Chief Dr Fiona Godlee so.

The Lancet Editor-in-Chief weighed in with false claims about Andrew Wakefield

Sarah Boseley reported in the *Guardian* about the Review on Statins: “The review is published by the *Lancet* medical journal, whose editor, Richard Horton, likened the harm done to public confidence by the critics of statins to that caused by the paper his journal published on the MMR (measles, mumps

²¹⁵ https://www.nature.com/articles/d41586-018-06693-7?WT.ec_id=NATURE-20180920&utm_source=nature_etoc&utm_medium=email&utm_campaign=20180920&spMailingID=57400609&spUserID=MTg5MTg3OTcxMTE51&spJobID=1482673247&spReportId=MTQ4MjY3MzI0NwS2

²¹⁶ <https://www.bmj.com/content/362/bmj.k3255>

and rubella) vaccine in 1998.”

“Controversy over the safety and efficacy of statins has harmed the health of potentially thousands of people in the UK,” the Editor-in-Chief wrote in a comment published with the review. In six months after the publication of “*disputed research and tendentious opinion*” on the side-effects of statins in 2013, a study estimated that over 200,000 patients stopped taking a statin. It predicted there would be 2,000 extra heart attacks and strokes over the next decade as a result. The *Lancet* was taking a stand, he said, “*because of our experience of MMR. We saw in a very painful way the consequences of publishing a paper which had a huge impact on confidence in a safe and effective vaccine. We learned lessons from that episode and those lessons need to be widely promulgated. They are lessons for all journals and all scientists.*”

I wrote to Richard Horton to correct his misapprehensions. He did not reply and failed to publish a correction in the *Lancet*. *The Lancet* (like the *Guardian*) is supported by the Rockefeller Foundation. The journal merged to form The Rockefeller Foundation/Lancet Commission on Planetary Health.

The sixth mass extinction and chemicals in the environment: our environmental deficit is now beyond nature’s ability to regenerate²¹⁷

Two papers about the future of the planet appeared within a month of each other (June/July 2015): *Accelerated modern human-induced species losses: Entering the sixth mass extinction*²¹⁸ was the first (5 pages long). The authors calculated the average rate of vertebrate losses over the last century and compared it with the background rate of losses. They estimated it to be up to 114 times the background rate. They asserted that this rate of losses of biodiversity indicated that a sixth mass extinction is already under way. The authors described themselves variously as ecologists, field biologists, paleo-biologists or population biologists, but all held two beliefs in common: that the conservation of natural ecosystems is essential to human health; but that the accelerated losses of biodiversity are as a result of human activity.

Safeguarding human health in the Anthropocene epoch: Report of The Rockefeller Foundation–Lancet Commission on planetary health was the second paper (56 pages long with 23 authors).²¹⁹

At least 10 of the authors were associated with the Rockefeller Foundation, although only one curriculum vitae acknowledged the fact. Sarah Whitmee was seconded to the Foundation to serve as lead author of the Report and member of the Foundation’s secretariat. One author worked as an environmental health scientist in the Office of the Science Adviser at the United States Environmental Protection Agency and was lead author of a recent paper *Biodiversity Loss Affects Global Disease Ecology*, which made no mention of pesticides. Most of the remainder were eminent public health doctors. The Rockefeller Foundation funded the initial research on genetically modified organisms in the early 1940s and founded the science of molecular biology, a highly reductionist programme aimed at “understanding” life. The Rockefeller Foundation supports biofortification of crops, the introduction of nutrients into crops by genetic engineering techniques for the supposed benefit of third world countries. The persistent and increasing global contamination of water and air by long-acting biocides, particularly formulated glyphosate and the neonicotinoid insecticides, are toxic not only to the poor, but to the rich as well. The Rockefeller Foundation’s early involvement in eugenics research and their subsequent support for depopulation are unlikely to be achieved before the sixth mass extinction. They funded the Nazi’s eugenics programme and IG Farben (Bayer) provided the chemicals for the concentration camps. They tested drugs and vaccines on inmates.

The Rockefeller–Lancet Report’s only reference to potential loss of pollinators by neonicotinoid insecticides was to one from the Oxford Martin Commission, endorsing Syngenta studies.

²¹⁷ https://www.academia.edu/17783363/The_sixth_mass_extinction_and_chemicals_in_the_environment

²¹⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4640606/>

²¹⁹ <https://www.thelancet.com/commissions/planetary-health?code=lancet-site>

The first author, Prof. Charles Godfray, was also lead author of *The Future of Food and Farming Report* (2011)²²⁰ (cooperation with Syngenta on genetically engineered (GE) wheat was discussed on p. 88 of the report). *“The experiments (on bees) described in Paras. 38 and 39 are true field experiments in the sense that the treatments involve the normal use of neonicotinoids, though only the Pilling et al. study was successfully concluded and found no effects of neonicotinoids but with limited statistical power to detect differences”*. That study was conducted by Syngenta scientists using a Syngenta product, thiamethoxam. Other one was a Defra study by Thompson *et al.*, commissioned by Syngenta, in which the controls were contaminated by a third neonicotinoid.

The Guardian/Observer is sponsored by the Bill and Melinda Gates Foundation and the Rockefeller Foundation: GMO Lobby Plots to Corrupt EU Court Ruling on Gene Editing²²¹

On 20/09/2018 William Engdahl, an award-winning geopolitical analyst, strategic risk consultant, author, professor and lecturer, writes: *“Gene-editing, which is being widely hyped in recent months by such Monsanto friends as Bill Gates (who sponsors vaccination in third world countries) and global agribusiness, involves new techniques to alter the genetic material of plants, animals and even bacteria, using “molecular scissors” aimed at a specific part of the organism’s DNA and used to cut that DNA. Gene Drive gene editing, which is being heavily funded by the Pentagon’s DARPA, aims to force a genetic modification to spread through an entire population, whether of mosquitoes or potentially humans, in just a few generations. The scientist who first suggested developing gene drives in gene editing, Harvard biologist Kevin Esvelt, has publicly warned that development of gene editing in conjunction with gene drive technologies have alarming potential to go awry. He notes how often CRISPR messes up and the likelihood of protective mutations arising, making even benign gene drives aggressive. He stresses, “Just a few engineered organisms [could irrevocably alter an ecosystem.](#)”*

New methods of genetic engineering and the 'poisonous CRISPR mushroom'²²²

18 July 2018 / Today Testbiotech is releasing a video clip about the first mushroom to be created through having its genome manipulated by CRISPR-Cas. It is worldwide the first CRISPR organism to be approved for use in food production: US authorities gave their go-ahead in 2016. Because no additional genes were inserted, the regulatory authorities did not request a detailed risk assessment. As yet, the mushroom is not available on the market.

Conclusion: in the case of the CRISPR mushroom, it would be necessary to examine whether the metabolism in the mushroom was changed unintentionally. The risk assessment cannot be confined to the level of DNA and the question of whether genes are inserted or not. The composition of the mushroom components also has to be investigated. However, no such investigations were carried out in the US, so it is not possible to draw any conclusions on their safety.

Global Justice: “Should Bill Gates be setting the global agenda for health and agriculture?”²²³

The Corporations (the Agrochemical Industry and the Pharmaceutical Industry) that the Gates Foundation funds and works closely with are those present at the Bilderberg Meetings whose objectives are to control the world. Monsanto, Cargill, Syngenta, DuPont, Bayer, Nestle, Mondelez and Mars are among the Corporations. *“The foundation is also pushing GM research in the UK. In 2012, a team of British plant scientists at the John Innes Centre in Norwich won a \$10 million grant to develop GM cereal crops; this was one of the largest single investments in GM in the UK... The*

²²⁰

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/288329/11-546-future-of-food-and-farming-report.pdf

²²¹ <https://m.journal-neo.org/2018/09/19/gmo-lobby-plots-to-corrupt-eu-court-ruling-on-gene-editing/>

²²² <https://www.testbiotech.org/en/node/2241>

²²³ <http://www.globaljustice.org.uk/sites/default/files/files/resources/gated-development-global-justice-now.pdf>

Swindon-based Biotechnology and Biological Sciences Research Council, which also promotes GM research, received an \$8 million grant in 2010 to “support high quality research on sustainable crop production in sub-Saharan Africa and South Asia... In June 2014, the BMGF gave \$5.6 million to another major GM developer and advocate, Cornell University, “to support a global agricultural communications platform that will improve understanding of science-based agricultural technologies”.

Global Justice Now reports that BMGF has an overwhelming focus on vaccines and GM technology. Bill Gates: “Donor countries, you must increase your investment in vaccines and immunization, even though you are coping with budget crises... All 193-member states, you must make vaccines a central focus of your health systems”

In his 2015 annual letter, for example, Bill Gates wrote that the next 15 years will see major breakthroughs in poor countries which: “will be driven by innovation in technology – ranging from new vaccines and hardier crops to much cheaper smartphones and tablets – and by innovations that help deliver those things to more people.”

Merck and GlaxoSmithKline (GSF) donated vaccines Gardasil and Cevaxix to prevent cervical cancer through the Gates Foundation in India that have caused illnesses and seven deaths; the trial was done without valid consent forms

Narayana Kumar, Times of India 31 August 2014: ‘Controversial vaccine studies: Why is Bill & Melinda Gates Foundation under fire from critics in India? “Several months after the vaccines were administered, many girls started falling ill and by 2010 five of them died in Andhra Pradesh and two died in Gujarat.”²²⁴

A standing committee on health and family welfare that investigated the irregularities pertaining to the observation studies in India tabled its report a year ago, on August 30.

The committee said it was “deeply shocked to find that in Andhra Pradesh out of the 9,543 [consent] forms, 1,948 forms have thumb impressions while hostel wardens have signed 2,763 forms. In Gujarat, out of the 6,217 forms 3,944 have thumb impressions and 5,454 either signed or carried thumb impressions of guardians. The data revealed that a very large number of parents or guardians are illiterate and could not even write in their local languages, Telugu or Gujarati.”

Earlier this month, taking a serious view of the death of seven tribal girls in the context of the observation studies, the Supreme Court asked the Drug Controller General of India (DCGI) and the Indian Council of Medical Research (ICMR) to explain how permissions were given.”

The Bill and Melinda Gates Foundation paid a PR firm to lobby the UN²²⁵

Jonathan Latham of Independent Science News reports: “The Bill and Melinda Gates Foundation this year paid a PR firm called *Emerging Ag* \$1.6 million to recruit a covert coalition of academics to manipulate a UN decision-making process over gene drives, according to emails obtained through Freedom of Information requests. Gene drives are a *highly controversial* new genetic extinction technology. They have been proposed as potentially able to eradicate malarial mosquitoes, agricultural pests, invasive species, as well as having potential military uses. *Emerging Ag* calls itself “a boutique international consulting firm providing communications and public affairs services.” Its president and founder is Robynne Anderson, a former international communications director of *CropLife*, the global lobby group for the biotechnology, seed, and pesticide industries.”

²²⁴ http://articles.economictimes.indiatimes.com/2014-08-31/news/53413161_1_hpv-vaccine-cervarix-human-papilloma-virus

²²⁵ <https://www.independentsciencenews.org/news/gates-foundation-hired-pr-firm-to-manipulate-un-over-gene-drives/>

Appeal for money by the Wellcome Foundation and the Bill and Melinda Gates Foundation²²⁶

The Ebola and Zika epidemics require a coordinated response involving infrastructure, international organisation and readily available vaccines.

Extracts: *“A healthy body has three essential systems for staying that way. There is physical fitness, building resilience against threats. There is the brain, to spot danger and take action. And there is the immune system, to neutralise infections that breach other defences.*

The world needs similar systems to protect against epidemic and pandemic diseases. We need a fit body – a basic infrastructure of public health. We need a nerve centre for preparedness and response – an international organisation to tackle threats. And we need an immune system – vaccines and drugs to prevent and treat disease.”

Written by Jeremy Farrar, Director of the Wellcome Foundation and Trevor Mundel, President of the Global Health Division at the Bill & Melinda Gates Foundation.

Zika Virus or Glyphosate and Larvicide Exposure Causing Microcephaly

After allegations broke out online that a toxic larvicide Pyriproxyfen may be the real cause of the microcephaly outbreak in Brazil, biotechnology company Monsanto has spoken out about the issue on Monday to clear up "rumors and misinformation."²²⁷

In a special Report for Reuters Why Brazil has a big appetite for risky pesticides.²²⁸ Paulo Prada reports sales of herbicides, pesticides and fungicides in 2013. Brazil (\$10.0 billion) outstrips the US at \$ 7.4 billion.

A recent study published in the New England Journal of Medicine reported Zika Virus surveillance in Colombia.²²⁹ Of 50 babies reported with microcephaly, only four (8 %) had laboratory evidence of congenital Zika virus infection on RT-PCR. The other 46 cases (92 %) were due to other causes. Of 1,850 pregnant women reported infected with Zika virus, no babies were born with microcephaly. The authors state: *“maternal infection with the Zika virus during the third trimester of pregnancy is not linked to structural abnormalities in the fetus.”*

The late Prof Andrés Carrasco and his team in Buenos Aires showed that glyphosate caused malformations in amphibian and chicken embryos, confirming the effects on humans

Paganelli, A. *et al.* Glyphosate-Based Herbicides Produce Teratogenic Effects on Vertebrates by Impairing Retinoic Acid Signaling *Chem. Res. Toxicol.*, 2010, 23 (10), 1586–1595

DOI: 10.1021/tx1001749²³⁰

Reports of neural defects and craniofacial malformations from regions where glyphosate-based herbicides (GBH) are used led them to undertake an embryological approach to explore the effects of low doses of glyphosate in development. Treated embryos were highly abnormal with marked alterations in cephalic and neural crest development and shortening of the anterior-posterior (A-P) axis. It was shown that the effects were due to the glyphosate itself, rather than the additive.

Birth defects in frog & chicken embryos and in humans²³¹

Genetically-Engineered Corn and Roundup®-Ready Soya were introduced into the rural towns of Argentina and Paraguay in 1996. The devastation of human and animal health and biodiversity is

²²⁶ <https://www.theguardian.com/global-development/2016/feb/27/global-defence-against-virus-zika-ebola-needed>

²²⁷ <https://www.techtimes.com/articles/133955/20160216/clearing-the-air-monsanto-speaks-out-about-zika-virus-microcephaly-and-sumitomo-larvicide.htm>

²²⁸ <https://www.reuters.com/investigates/special-report/brazil-pesticides/>

²²⁹ <https://www.nejm.org/doi/full/10.1056/NEJMoa1604037#t=article>

²³⁰ <http://pubs.acs.org/doi/abs/10.1021/tx1001749>

²³¹ https://www.academia.edu/5023929/Pesticides_Used_in_South_American_GMO-Based_Agriculture_A_Review_of_Their_Effects_on_Humans_and_Animal_Models

described in this chapter: *“In South America, the incorporation of genetically modified organisms (GMO) engineered to be resistant to pesticides changed the agricultural model into one dependent on the massive use of agrochemicals. Different pesticides are used in response to the demands of the global consuming market to control weeds, herbivorous arthropods, and crop diseases. Here, we review their effects on humans and animal models, in terms of genotoxicity, teratogenicity, and cell damage. We also stress the importance of biomarkers for medical surveillance of populations at risk.*

Argentinian and Brazilian Doctors agree that pyriproxyfen was probably the cause

The increase in this birth defect, in which the baby is born with an abnormally small head and often has brain damage, was quickly linked to the Zika virus by the Brazilian Ministry of Health.²³²

However, according to the Physicians in the Crop-Sprayed Towns, the Ministry failed to recognise that in the area where most sick people live, a chemical larvicide that produces malformations in mosquitoes was introduced into the drinking water supply in 2014. This poison, Pyriproxyfen, is used in a State-controlled programme aimed at eradicating disease-carrying mosquitoes. The Physicians added that the Pyriproxyfen is manufactured by Sumitomo Chemical, a Japanese subsidiary of Monsanto. Pyriproxyfen is a growth inhibitor of mosquito larvae, which alters the development process from larva to pupa to adult, thus generating malformations in developing mosquitoes and killing or disabling them. It acts as an insect juvenile hormone or juvenoid, and has the effect of inhibiting the development of adult insect characteristics (for example, wings and mature external genitalia) and reproductive development. It is an endocrine disruptor and is teratogenic (causes birth defects).

The Argentine Physicians commented: *“Malformations detected in thousands of children from pregnant women living in areas where the Brazilian state added Pyriproxyfen to drinking water are not a coincidence, even though the Ministry of Health places a direct blame on the Zika virus for this damage.”*

They also noted that Zika has traditionally been held to be a relatively benign disease that has never before been associated with birth defects, even in areas where it infects 75% of the population.

Larvicide the most likely culprit in birth defects

Pyriproxyfen is a relatively new introduction to the Brazilian environment; the microcephaly increase is a relatively new phenomenon. So, the larvicide seems a plausible causative factor in microcephaly – far more so than GM mosquitoes, which some have blamed for the Zika epidemic and thus for the birth defects. There is no sound evidence to support the notion promoted by some sources that GM mosquitoes can cause Zika, which in turn can cause microcephaly. In fact, out of 404 confirmed microcephaly cases in Brazil, only 17% [tested](#) positive for the Zika virus.

Brazilian doctors agree Pyriproxyfen is chief suspect

The Argentine Physicians’ report, which also addresses the Dengue fever epidemic in Brazil, concurs with the findings of a separate [report](#) on the Zika outbreak by the Brazilian doctors’ and public health researchers’ organisation, Abrasco. Abrasco also names Pyriproxyfen as a likely cause of the microcephaly. It condemns the strategy of chemical control of Zika-carrying mosquitoes, which it says is contaminating the environment as well as people and is not decreasing the numbers of mosquitoes. Abrasco suggests that this strategy is in fact driven by the commercial interests of the chemical industry, which it says is deeply integrated into the Latin American ministries of health, as well as the World Health Organization and the Pan American Health Organisation.

Abrasco names the British GM insect company Oxitec as part of the corporate lobby that is distorting the facts about Zika to suit its own profit-making agenda. Oxitec sells GM mosquitoes engineered for sterility and markets them as a disease-combatting product – a strategy condemned by the Argentine Physicians as “a total failure, except for the company supplying mosquitoes”.

²³² <https://www.organicconsumers.org/news/argentine-and-brazilian-doctors-name-larvicide-potential-cause-microcephaly>

The poor suffer most

Both the Brazilian and Argentine doctors' associations agree that poverty is a key neglected factor in the Zika epidemic. Abrasco condemned the Brazilian government for its "*deliberate concealment*" of economic and social causes: "*In Argentina and across America the poorest populations with the least access to sanitation and safe water suffer most from the outbreak.*" The Argentine Physicians agreed, stating, "*The basis of the progress of the disease lies in inequality and poverty.*" Abrasco added that the disease is closely linked to environmental degradation: floods caused by logging and the massive use of herbicides on (GM) herbicide-tolerant soy crops – in short, "*the impacts of extractive industries*".

How did John D. Rockefeller, whose doctor was a homeopath, fund chemical medicines made from coal tar and crude oil?

Rockefeller Foundation's millions were diverted into closing down homeopathic hospitals in New York by his corrupt advisers²³³

Extracts from Sue Young: "John D. Rockefeller Snr. instructed *Frederick Gates*, his financial advisor, to issue major grants to homeopathic institutions. An advocate of conventional medicine, Gates ignored his boss's orders and \$350 million in donations went to orthodox medicine and hospitals. Gates was strongly interested in German medicine, and was opposed to the traditional homeopathic medicine used by Rockefeller's personal physician, *Hamilton Fisk Biggar*, with whom he often had heated arguments.

Despite his personal preference for homeopathy, Rockefeller, on Gates's advice, became one of the first great benefactors of medical science. In 1901, he founded the *Rockefeller Institute for Medical Research* in New York. It changed its name to *Rockefeller University* in 1965, after expanding its mission to include graduate education.

Abraham Flexner, the owner of a bankrupt prep school, had the good fortune to have a brother, Simon, who was director of the *Rockefeller Institute for Medical Research*. At his brother's suggestion, Abraham Flexner was hired by the Rockefeller-allied Carnegie Foundation so that the report would not be seen as a Rockefeller initiative. And *Andrew Carnegie*, whose main goal was to "rationalize" higher education, that is, replace religion with science, saw the American Medical Association cartelization drive as useful.

Claiming to have investigated nearly every school in the country, Flexner rated them on suitability. Schools he praised received lush grants from the Rockefeller and associated foundations, and almost all the medical schools he condemned were shut down, especially the "commercial" institutions. AMA-dominated state medical boards ruled that in order to practice medicine, a doctor had to graduate from an approved school. Post-Flexner, a school could not be approved if it taught alternative therapies, didn't restrict the number of students, or made profits based on student fees. One of the consequences of Flexner's advocacy of university-based medical education was that medical education became much more expensive, putting such education out of reach of all but upper middle-class white males. The small "proprietary" schools Flexner condemned, which were contended to have been based in generations-old folk traditions rather than relatively recent western science, did admit African-Americans, women, and students of limited financial means. These students usually could not afford 6-8 years of university education, and were often simply denied admission to medical schools affiliated with universities.

A further severe blow to homeopathy was the *Flexner Report in 1910*, (*John E. Churchill*, president of the Board of Education of New York, called the report a "menace to the freedom of teaching." Years later, Flexner admitted that he knew nothing about medical education. But he did not need to in order to serve his employers' purposes.)

²³³ <http://sueyounghistories.com/archives/2007/08/28/john-davison-rockefeller-senior-and-homeopathy/>

The Flexner Report was an evaluation of medical schools by the AMA. In view of the AMA's traditional opposition to "sectarian medicine," it is not surprising that the examiners gave a low rating to homeopathic medical schools, among others, thus denying them a share in the millions of dollars, principally the Rockefeller grants, that were being given to allopathic institutions. One by one, the homeopathic medical schools closed and the homeopathic hospitals were converted to standard institutions. With the advent of the "wonder drugs" in the early 1940s, homeopathy appeared to be obsolete.

It was several years before Flexner finally cashed in, securing a \$1.5 million gift from the Board to the German-oriented Johns Hopkins University. That same year (1913), he left Carnegie and joined the Board to direct the allocation of Rockefeller millions to the development of chemically oriented medicine in the United States. It is interesting to note that the basic ingredient for almost all chemicals is coal tar or crude oil. Rockefeller's Standard Oil Company naturally could and would supply the crude oil for the drugs the new doctors and medical schools would religiously promote. The Rockefeller group would also later become involved in many major drug companies and cartel agreements thereby directly profiting from drug sales within the new drug-oriented medical field it supported and helped create.

Sadly, there is much evidence that illnesses such as Cancer and Alzheimer's are largely caused by chemical food additives, cosmetics, pesticides, solvents and chemical poisons which permeate our modern environment (these organic chemical substances are also derived largely from crude oil)".

That is why the corrupt EFSA looks more closely at natural products than they do GMO foods

Why is EFSA demanding stringent applications?²³⁴ If there are individuals on the GMO Panels with conflicts of interest, then it is likely that similarly they will get onto EFSA's Panel on Dietetic Products, Nutrition and Allergies (NDA). Health claims made in relation to food products require authorisation²³⁵ before they can be used in the labelling and marketing of these products in the EU. Within the context of this authorisation procedure, EFSA's Panel on NDA is responsible for verifying the scientific substantiation of the health claims.²³⁶

Ability of proper nutrition to promote health

Prof T Colin Campbell also identifies our "neglect of the remarkable ability of nutrition to promote health and decrease illness."²³⁷ He quotes Hippocrates: "Let food be thy Medicine." "Can diet cure disease, and not just prevent it? Scientific evidence is accumulating that diets which emphasize consumption of plants and which avoid meat and dairy products can rapidly reverse common and life-threatening chronic diseases such as diabetes and heart disease. For these and other common diseases research is showing that a diet-based cure is much more effective than current medical treatments which are largely ineffectual, expensive, and plagued by side effects. These important facts about the power of nutrition are not widely known, however. That is because they simultaneously challenge the food industry, the pharmaceutical industry, and the medical profession." Professor Campbell also asked why cancer research has stalled.²³⁸

The non-mutagenic nutrition effects we observed in our research on cancer development closely resemble the nutrition-based effects known to dramatically reverse other diseases, including advanced coronary heart disease and diabetes (Esselstyn 2014 and Barnard 2009). These nutrition-based effects have been observed as a result of the dietary lifestyle composed of whole plant-based foods without added oil and refined carbohydrates. The benefits are truly remarkable, broad in scope, and surprisingly rapid in response (Campbell and Campbell 2005; Campbell 2013).

²³⁴ <http://www.efsa.europa.eu/en/nda/ndaclaims.htm>

²³⁵ [Regulation EC 1924/2006](http://www.efsa.europa.eu/en/nda/ndaclaims.htm)

²³⁶ http://europa.eu/legislation_summaries/consumers/product_labelling_and_packaging/l21306_en.htm

²³⁷ <http://www.independentsciencenews.org/health/the-healthcare-doctors-forgot-ordinary-food-will-be-the-new-medicine>

²³⁸ <https://www.independentsciencenews.org/health/why-cancer-research-has-stalled/>

The collapse of civilisation

Prof Paul Ehrlich on 11/07/2017 after the publication of the Sixth Mass Extinction

"You don't need a scientist to know what's causing the sixth mass extinction. It's simple. It's us. The more people there are, the more habitats we destroy. Human civilisation can only survive if the population begins to shrink.

One should not need to be a scientist to know that human population growth and the accompanying increase in human consumption are the root cause of the sixth mass extinction we're currently seeing. All you need to know is that every living being has evolved to have a set of habitat requirements. An organism can't live where the temperature is too hot or too cold. If it lives in water, it requires not only an appropriate temperature range, but also appropriate salinity, acidity and other chemical characteristics. If it is a butterfly, it must have access to plants suitable for its caterpillars to eat. A lion requires plant-eaters to catch and devour. A tree needs a certain amount of sunlight and access to soil nutrients and water. A falciparum malaria parasite can't survive and reproduce without Anopheles mosquitos in its habitat and a human bloodstream to infest. Less recognised, but perhaps even more dangerous to both people and wildlife, is the increasing toxification of the entire planet with synthetic chemicals. Growing populations want myriad more items of plastic that often leak toxic chemicals: more cosmetics, cleansing compounds, pesticides, herbicides, preservatives and industrial chemicals. Many of these novel chemicals mimic natural hormones, and in tiny quantities can alter the development of animals or human children, with potentially catastrophic consequences. As with climate disruption, this is one more case of human overpopulation threatening civilisation.

Prof Paul Ehrlich interviewed by Damian Carrington in March 2018 ²³⁹

A shattering collapse of civilisation is a "near certainty" in the next few decades due to humanity's continuing destruction of the natural world that sustains all life on Earth, according to biologist Prof Paul Ehrlich. The world's optimum population is less than two billion people – 5.6 billion fewer than on the planet today, he argues, and there is an increasing toxification of the entire planet by synthetic chemicals that may be more dangerous to people and wildlife than climate change.

Ehrlich also says an unprecedented redistribution of wealth is needed to end the over-consumption of resources, but *"the rich who now run the global system – that hold the annual 'world destroyer' meetings in Davos – are unlikely to let it happen"*.

Ehrlich is also concerned about chemical pollution, which has already reached the most remote corners of the globe. *"The evidence we have is that toxics reduce the intelligence of children, and members of the first heavily influenced generation are now adults."*

He treats this risk with characteristic dark humour: *"The first empirical evidence we are dumbing down Homo sapiens were the Republican debates in the US 2016 presidential elections – and the resultant kakistocracy. On the other hand, toxification may solve the population problem, since sperm counts are plunging."*

BaumHedlund attorneys outline the schedule for 9,000 cases against Monsanto for Roundup causing Non-Hodgkin's Lymphoma in the US

In the UK each year there are increasing numbers of cases of NHL, but Cancer Research UK says that Roundup does not cause cancer so the government won't ban it

Lawyers acting for Dewayne Lee Johnson this week filed documents opposing Monsanto's move to overturn the jury's verdict, order a new trial or reduce the damages.

²³⁹ <https://www.theguardian.com/cities/2018/mar/22/collapse-civilisation-near-certain-decades-population-bomb-paul-ehrich>

Monsanto is challenging the verdict of the Californian court delivered in August that Roundup, which contains the active ingredient glyphosate, caused Mr Johnson's cancer and the punitive award of \$289 million damages.

But Mr Johnson's lawyers, BaumHedlund, say all the issues raised by Monsanto have been addressed and that the jury was "highly educated" and "attentive".

There will be a hearing on 10 October with the judge, Suzanne R Bolanos.

Separately, lawyers for people who claim Roundup caused their non-Hodgkin lymphoma have consolidated 243 cases in Oakland, California. There is a hearing on 9 October to request an expedited trial for husband and wife, Alva and Alberta Pilliod, who both have the disease.

Bayer, which now owns Monsanto, told investors there would be no more trials this year but the couple, who are in their seventies, are asking to go before a jury in December "before they die".

Hundreds of other cases are lined up to be heard starting next year with 515 consolidated cases in the Northern District of California before presiding judge Chhabria who ruled that the first case could be tried.

Altogether, there are now approaching 9,000 cases filed in the US.

In the UK there were 13,605 new cases of Non-Hodgkin Lymphoma in 2015 (and 4,920 deaths in 2016).²⁴⁰ Each year there are steady increases in the numbers of new cancers, and increases in deaths from the same cancers, with no treatments making any difference to the numbers.

In 2011, CRUK began donating money (£450 million/year) to the Government's Strategy for UK Life Sciences and AstraZeneca provided 22 compounds to academic research to develop medicines.²⁴¹

Few will escape these silent killers; they are in our food, water, rainfall and the air we breathe

Few can avoid the pollution of water, soil and air by genotoxic and teratogenic herbicides, insecticides and other industrial chemicals. Governments and Regulators only measure a small fraction of them. Human health depends on biodiversity. The production of food depends on natural pollinators. The devastating effects of these silent killers on us and our environment do not distinguish between farmers or city dwellers, the wealthy or the poor, between media moguls, editors or their reporters, Monsanto or Syngenta Executives, Prime Ministers or Presidents. Humans and the environment are being silently poisoned by thousands of untested and unmonitored chemicals.

Rosemary Mason 10 October 2018

²⁴⁰ <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/non-hodgkin-lymphoma>

²⁴¹ <https://www.gov.uk/government/publications/uk-life-sciences-strategy>