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The UK Science Media Centre is controlled by industry

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

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."¹

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 science²

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, Monsanto and GMO lobbyists set about discrediting and destroying the paper by Séralini and his team. After a year, Wallace Hayes, the Editor of *Food and Chemical Toxicology* retracted the paper under pressure from Monsanto, but it was republished.

¹ <https://www.nature.com/news/two-nations-divided-by-a-common-purpose-1.10224?nc=1376335775294>

² <https://www.scidev.net/global/journalism/feature/uk-s-science-media-centre-lambasted-for-pushing-corporate-science.html>

Some reporters stand accused of conveying messages from AstraZeneca, BP, Coca-Cola, L'Oreal, Monsanto, Syngenta (as well as Nature Publishing Group) to the public

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 (Republished)

*"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 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."*³

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 Glyphosate⁴

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."

Controlled by the pharmaceutical industry. Statins should be given to older patients to avoid death and disability

Recommendations based on Drug Trials are financed by the drug companies themselves

UK Science Media Briefing for journalists: Efficacy and safety of statin therapy in older people: a meta-analysis of individual participant data from 28 randomised controlled trials by the Cholesterol Treatment Trialists' Collaboration was published in the *Lancet* at 23:30 UK time on Thursday 31 January 2019.⁵

*"Thousands of deaths and the wrecking of many lives by disability could be averted if doctors routinely offered a daily statin pill to older people, scientists say."*⁶ The expert comments are from doctors who admit to having, at some time, been employed by pharmaceutical companies.

The beginning of the marketing of statins to lower blood cholesterol in the mid-1990s

"To market statins effectively, Merck had to convince the public of the dangers of high cholesterol, and doctors that statins were safe and would extend lives.

³ <http://enveurope.springeropen.com/articles/10.1186/s12302-014-0014-5>

⁴ https://vdw-ev.de/wp-content/uploads/2016/07/full_reasoning_whistleblower_serolini_en.pdf

⁵ <http://www.sciencemediacentre.org/expert-reaction-to-meta-analysis-looking-at-statin-and-cardiovascular-events-in-all-ages/>

⁶ <https://www.theguardian.com/society/2019/jan/31/fake-news-and-ageism-keeping-statin-from-older-people>

As a result of public campaigns, people in the United States became familiar with their cholesterol numbers and the difference between "good" and "bad" cholesterol, and rival pharmaceutical companies began producing their own statins, such as pravastatin (Pravachol), manufactured by Sankyo and Bristol-Myers Squibb. In April 1994, the results of a Merck-sponsored study, the Scandinavian Simvastatin Survival Study, were announced."

South American tribe found to have the healthiest hearts ever studied⁷

The Tsimane people, who live in the Bolivian Amazon, spend most of every day hunting, fishing, farming and gathering wild fruits and nuts, and follow a carbohydrate-based diet containing little protein and fat. Scientists who examined hundreds of men and women from the group found that almost nine out of 10 had clear arteries showing no risk of heart disease. Even in old age most remained in astonishingly good health. Members of the tribe also had low readings for heart rate, blood pressure, cholesterol and blood sugar. Many other people who live on a non-westernised diet have 'normal' levels of cholesterol.

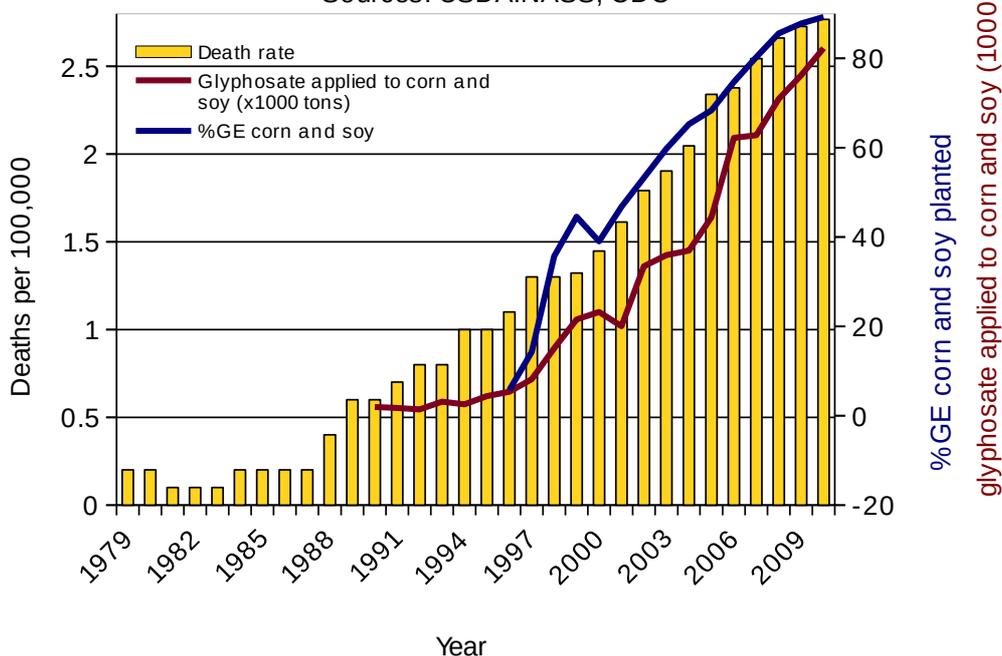
Increasing levels of Roundup weedkiller poisoning our food

Some UK farmers started to spray Roundup preharvest at the suggestion of a Monsanto scientist and endorsed by ADAS in 1980.⁸ Glyphosate and other pesticide residues were found in foods.

Age Adjusted Deaths due to Disorders of Lipoprotein Metabolism (ICD E78.5 hyperlipoproteinemia & E78.0 hypercholesterolemia)

plotted against %GE corn & soy ($R = 0.9549$, $p \leq 4.694 \times 10^{-6}$)
and glyphosate applied to corn & soy ($R = 0.9734$, $p \leq 7.886 \times 10^{-9}$)

Sources: USDA:NASS; CDC



⁷ <https://www.telegraph.co.uk/news/2017/03/18/south-american-tribe-found-have-healthiest-hearts-ever-studied/>

⁸ <http://www.hgca.com/media/185527/is02-pre-harvest-glyphosate-application-to-wheat-and-barley.pdf>

The pesticides corporations and pharmaceutical corporations are making massive amounts of money. One is creating diseases and the other is developing medicines to cure them.

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.'*⁹

Dr Leemon McHenry (California State University, Northridge) has written on how the pharmaceutical industry manipulates studies and gets away with fraud.¹⁰ 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."*¹¹

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.¹²

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.¹³

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."*¹⁴ 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.

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.

⁹ <https://www.chemistryworld.com/news/patrick-vallance-named-as-uks-next-chief-scientific-adviser/3008255.article>

¹⁰ https://www.academia.edu/35773218/Industry-Corrupted_Psychiatric_Trials

¹¹ <https://jamanetwork.com/journals/jama/article-abstract/182478?redirect=true>

¹² <https://abcnews.go.com/International/glaxosmithkline-gsk-fined-4888-million-massive-bribery-network/story?id=25624684>

¹³ <https://www.theguardian.com/business/2016/feb/12/glaxosmithkline-fined-anti-competitive-behaviour-seroxat>

¹⁴ <https://www.bmj.com/content/362/bmj.k3948>

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.”

Shockingly high levels of weed killer in UK cereals marketed for British children

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.¹⁵ 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 (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 weed killer in UK cereals marketed for British children¹⁶

Type of breakfast cereal marketed for children Product description	Glyphosate level ng/g	AMPA ng/g	Effective glyphosate level ng/g
Kelloggs No added sugar granola with Apricot & pumpkin seeds	499.90	ND	499.90
Quaker/Oat So simple/Original Microwaveable Oats	464.23	24.04	500.28
Weetibix Oatibix 100% wholegrain oats	318.85	16.96	344.28
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%.	137.29	ND	137.29

¹⁵ <https://www.theguardian.com/environment/2018/aug/16/weedkiller-cereal-monsanto-roundup-childrens-food>

¹⁶ <https://www.dailymail.co.uk/health/article-6315209/Revealed-UK-cereals-contain-potentially-harmful-amounts-WEEDKILLER.html>

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; 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 Director said: *“These are shockingly high levels. 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).*

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 2001.¹⁷ 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'.

In the UK there were 13,605 new cases of Non-Hodgkin Lymphoma in 2015 (and 4,920 deaths in 2016)¹⁸

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.¹⁹

Lord Gardiner of Kimble, Under-Secretary of State for Defra, answered questions on Roundup in the House of Lords 31 August 2018: He assured the HOL that Roundup was safe. Extracts:

REPLY Lord Gardiner of Kimble: *“My Lords, there is robust EU and UK law on the use of weedkillers. The Government will always base their assessments of safety on the best scientific evidence*

¹⁷ https://www.vinci.com/vinci.nsf/en/management-board-directors/pages/michael_pragnell.htm

¹⁸ <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/non-hodgkin-lymphoma>

¹⁹ <https://www.gov.uk/government/publications/uk-life-sciences-strategy>

available. Clearly, users of Roundup and other weedkillers should always read the instructions and use the product responsibly, and in accordance with the instructions, as indeed they should for many other household products.”

QUESTION Baroness Jones of Moulsecoomb: “I thank the Minister for his reply. I am sure that it is general knowledge that the landmark verdict in a case in the United States was that Roundup and glyphosate herbicides can cause cancer, and Monsanto has acted with “malice and oppression” by selling it in full awareness of the risks. Given that here in the UK farmers have to keep such pesticides under lock and key in a steel cupboard, how can it be all right to sell it freely in the supermarkets on open shelves? Is that not a risk for both shoppers and workers?”

REPLY Lord Gardiner of Kimble: “My Lords, the recent case was a civil court case with a non-expert jury. There was no new scientific evidence presented regarding safety as part of the court case, and so it does not raise doubts about the scientific assessments underpinning the EU approval decision. Of course, we have in this country, and through the EU as well, very strict rules about authorisations and approvals. There are many requirements for Roundup, and it is important that it is used responsibly, but it is safe.”

Monsanto to go on trial again for concealing that Roundup caused cancer

Monsanto to go on trial again in the US for concealing that Roundup caused cancer²⁰

On 30/01/2019 Katherine Paul of Organic Consumers Association reported: “In a few weeks, Monsanto will go on trial again. And when it does, the pesticide-maker won’t be able to suppress evidence that the company ghostwrote scientific studies and otherwise tried to influence scientists and regulators in an attempt to hide the potential health risks of its flagship product, Roundup weedkiller.

This week, U.S. District Judge Vince Chhabria, the federal judge in San Francisco overseeing 620 cases involving Monsanto’s Roundup weedkiller and cancer victims, ruled that the evidence could be introduced in the upcoming trial. According to a Reuters report, Chhabria said the documents were “super relevant.”

Chhabria’s ruling almost guarantees that the documents in question will play a role when, on February 25, a jury in San Francisco Federal Court, begins hearing the case of Edwin Hardeman vs. Monsanto. Hardeman alleges that Roundup caused his non-Hodgkin lymphoma cancer. Hardeman’s case follows the August 10, 2018, \$289-million judgment (later reduced to \$78 million) awarded to DeWayne “Lee” Johnson, a former school groundskeeper who also sued Monsanto for causing his non-Hodgkin lymphoma. Monsanto’s appeal of the \$78-million judgment is still pending.

There are more than 9,000 claims pending against Monsanto in state courts, about 620 awaiting trial in federal court. Reuters reported in November that Hardeman’s case was selected as “a so-called bellwether, or test trial, frequently used in U.S. product liability mass litigation to help both sides gauge the range of damages and define settlement options.”

Bayer CEO Werner Baumann called the lawsuits “nuisances.” But the company’s stock took a big hit after the jury sided with Johnson, so shareholders probably aren’t thrilled with Chhabria’s ruling this week.”

On 28/08/2018 Robert F Kennedy Jr. one of the Attorney’s fighting Bayer, said: Bayer Needs More Than an Aspirin to Cure Its Monsanto-Sized Headache²¹

²⁰ <https://www.organicconsumers.org/blog/and-hits-just-keep-coming-more-bad-news-monsanto>

²¹ <https://www.organicconsumers.org/blog/kennedy-monsanto-roundup-verdict-bayer-stock>

“In a special telephone meeting on Thursday, August 23, Bayer AG’s CEO Werner Bauman tried to reassure the German conglomerate’s principal shareholders who were concerned about the recent [drop](#) in the company’s stock. Bayer’s stock fell dramatically after an unfavorable [verdict](#) against Bayer’s St. Louis subsidiary, Monsanto.

Bauman expressed his confidence in [Monsanto](#) and predicted a sunny future for its flagship herbicide, Roundup. He told his top-tier investors that Bayer had performed an adequate due-diligence on Monsanto before [purchasing](#) the troubled company for \$66 billion this past June. At the time of its purchase, Monsanto told its German suitors that a \$270-million set-aside would cover all its outstanding liabilities arising from Monsanto’s 5,000 Roundup cancer lawsuits.

Bauman did concede to anxious shareholders that Monsanto had withheld [internal papers](#) relevant to the case. Bayer never saw those internal Monsanto documents prior to the purchase.

It’s no surprise that Monsanto kept secrets from Bayer. Johnson’s jury [heard evidence](#) that for four decades Monsanto maneuvered to conceal Roundup’s carcinogenicity by capturing regulatory agencies, corrupting public officials, bribing scientists and engaging in scientific fraud to delay its day of reckoning. The jury found that these activities constituted “malice, fraud and oppression” warranting \$250 million in punitive damages.

I am one of several attorneys representing, collectively, now some 8,000 clients with similar cases. I attended the two-month trial and worked with the trial team led by two young and exceptionally gifted lawyers, Brent Wisner of Baum Hedlund Aristei & Goldman and Dave Dickens of The Miller Firm. For Bayer the worst is yet to come.

Despite Monsanto’s efforts, the science [linking glyphosate](#)—Roundup’s active ingredient—to non-Hodgkin’s lymphoma has passed the critical inflection point. European nations are [moving](#) to ban or restrict the chemical, and California regulators and courts have [ordered](#) Monsanto to warn consumers of Roundup’s carcinogenicity at all points of sale. Both federal and state courts across the country have agreed that the question can be sent to juries. Hundreds of new inquiries have flooded our offices since the Johnson verdict.

Perhaps more ominously for Bayer, Monsanto also faces cascading scientific evidence [linking glyphosate](#) to a constellation of other injuries that have become prevalent since its introduction, including obesity, depression, Alzheimer’s, ADHD, autism, multiple sclerosis, Parkinson’s, kidney disease, and inflammatory bowel disease, brain, breast and prostate cancer, miscarriage, birth defects and declining sperm counts. Strong science suggests glyphosate is the culprit in the exploding epidemics of celiac disease, colitis, gluten sensitivities, diabetes and non-alcoholic liver cancer which, for the first time, is attacking children as young as 10.

Researchers peg glyphosate as a potent endocrine disruptor, which interferes with sexual development in children. The chemical compound is certainly a chelator that removes important minerals from the body, including iron, magnesium, zinc, selenium and molybdenum.

Roundup [disrupts the microbiome](#) destroying beneficial bacteria in the human gut and triggering brain inflammation and other ill effects.

The public’s growing concerns with Roundup are, in part, due to Monsanto’s overreaching.

For two decades following its licensing in 1974, farmers and gardeners used Roundup as a conventional weedkiller. After Monsanto’s introduction of Roundup Ready seeds in the 1990s, farmers began aerial spraying of the herbicide on entire fields, including newly planted corn, canola and soy genetically altered to thrive in the toxic mist that killed all neighboring weeds.

Then, around 2006, Monsanto started marketing Roundup as a [desiccant](#) to dry up oats and wheat immediately before harvest. For the first time, farmers were spraying the chemical directly on food. Roundup sales rose dramatically to 300 million pounds annually in the U.S., with farmers spraying enough to cover every tillable acre in America with a gallon of Roundup.

Glyphosate now accounts for about [50% of all herbicide use](#) in the U.S. About [75% of glyphosate use](#) has occurred since 2006, with [the global glyphosate](#) market projected to reach \$11.74 billion by 2023. Never in history has a chemical been [used](#) so pervasively. Glyphosate is in our air, water,

plants, animals, grains, vegetables and meats. It's in beer and wine, children's [breakfast cereal and snack bars](#) and mother's breast milk. It's even in our vaccines.

As grim as its financials now look, Monsanto's reputational liability may be even more of an anchor for Bayer than all the lawsuits. Environmentalists complain that Roundup is exterminating at least 13 species in the U.S. alone, including North America's iconic [Monarch butterfly](#). Human rights advocates blame the [suicides](#) of more than 200,000 Indian farmers on the suffocating economics caused by Monsanto's monopolistic control of international seed stocks. Government regulators are already under pressure to restrict these sorts of chemical mayhems with laws limiting glyphosate and GMOs. Monsanto has carved out a market niche monetizing deadly chemicals that more squeamish companies shun, a strategy that has made the company the Snidely Whiplash of corporate scoundrels and the planet's worst villain, according to many environmentalists and human rights advocates. As a boy, I watched Monsanto's vicious campaign to pillory the dying heroine Rachel Carson over her book, "Silent Spring," in its efforts to exonerate its pesticide DDT which was wiping out songbirds and the American bald eagle."

----- Forwarded Message -----

Subject:Open Letter to Bayer CropScience

Date:Mon, 7 Jan 2019 10:24:53 +0000

From:Rosemary Anne Mason <rosemary.mason01@btinternet.com>

To:werner.baumann@bayer.com, david.fischer@bayer.com, liam.condon@bayer.com

Werner Baumann
Chief Executive
Bayer CropScience

Dear Werner Baumann,

An advertisement that Bayer placed in Politico and the Farmers' Guardian on 19/12/2018

"Transparency creates trust. At Bayer, we embrace our responsibility to communicate how we assess our products' safety — and we recognize that people around the world want more information around glyphosate. This month, we published more than 300 study summaries on the safety of glyphosate on our dedicated [transparency website](#). "

Bayer CropScience has never been transparent in its life

Formerly IG Farben, the private German chemicals company allied with the Nazis, that manufactured the [Zyklon B](#) gas used to commit genocide against millions of European Jews in the [Holocaust](#). It built a factory next to Auschwitz so it could exploit Jewish slave labour in its oil and rubber production plant. In total, some 300,000 detainees from Auschwitz were employed in IG Farben's workforce, supplying the company with free labour. The company housed the workers in its own concentration camp, with the horrendous conditions there and in the factory leading to an estimated 30,000 deaths. On top of this, an unknown number of workers deemed unfit to continue working at the factory were sent to the death camp at Auschwitz. Alongside the brutal conditions of the labour camp, IG Farben also sanctioned drug experiments on live, healthy inmates. IG Farben was probably the most well-known corporate participant in the Holocaust, and the company's history sheds a chilling light on how genocide became tied in with economics and business.

Bayer CropScience and Monsanto are Criminal Corporations.

Yours sincerely

Rosemary Mason MB, ChB, FRCA

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 health

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. ²² "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."

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 pathologies ²³ 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.

²² <https://www.gov.uk/government/publications/health-profile-for-england-2018/chapter-2-trends-in-mortality>

²³ <http://www.amsi.ge/jbpc/31515/11SA15R.pdf>

A Senior Monsanto scientist had claimed that glyphosate didn't accumulate but was excreted unchanged from the body²⁴ 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-phosphonomethyl 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 believe that long-term exposure is not necessary for the induction of cancer."*²⁵ 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'**.²⁶ In England in July 2017 the NHS waiting list for hip replacement (and cataract surgery) exceeded 4 million. Is that why sportsmen in the US and UK are having to retire early due to injury?

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 1980²⁷ 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 2014.²⁸

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

²⁴ <https://gmoanswers.com/ask/hi-does-senior-monsanto-scientist-dan-goldstein-still-maintain-if-ingested-glyphosate-excreted>

²⁵ https://oehha.ca.gov/media/dockets/8594/8767-anthony_samsel/letter_ca_epa_june_32017_draft.pdf

²⁶ <http://www.sciencemag.org/news/2017/08/knee-arthritis-americans-has-doubled-1940>

²⁷ <http://www.hgca.com/media/185527/is02-pre-harvest-glyphosate-application-to-wheat-and-barley.pdf>

²⁸ <http://www.wales.nhs.uk/sitesplus/888/news/33512>

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.*²⁹

Both patients and staff are eating food poisoned by weedkiller: that's why the NHS is failing

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 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*

²⁹ https://www.gmoseralini.org/wp-content/uploads/2018/01/Defarge-et-al._TOXREP_2018.pdf

ultra-low dose of Roundup herbicide. ³⁰ 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.*"³¹

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.*" ³²

UN expert on Toxics, Baskut Tuncak The EU and glyphosate: it's time to put children's health before pesticides ³³

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 pesticides

"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 –

³⁰ <http://www.nature.com/articles/srep39328>

³¹ <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>

³² <https://www.sciencedirect.com/science/article/pii/S0033350612004672>

³³ <https://www.theguardian.com/environment/2017/nov/06/the-eu-and-glyphosate-its-time-to-put-childrens-health-before-pesticides>

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?

European Chemical Agency Report on the re-assessment of glyphosate. This formed the basis of the European Commission’s renewal of glyphosate’s licence for 5 years

Published 15/03/2017 ECHA said the available scientific evidence did not meet the criteria to classify glyphosate as a carcinogen, as a mutagen or as toxic for reproduction but it was **classified as causing serious eye damage and as being toxic to aquatic life with long lasting effects.**³⁴

Why did the final version of the proposal on glyphosate omit the full classification?

The President of the European Commission, Jean-Claude Juncker, signed the Final version of the commission proposal. It says: *“In its opinion, the Committee for Risk Assessment of the Agency (European Chemicals Agency) concluded by consensus that on the basis of the information currently available, no hazard classification for carcinogenicity is justified for glyphosate.”* The omission of the full classification would appear to be intentionally fraudulent.³⁵

Genetically-engineered crops, glyphosate and the deterioration of health in the United States of America. Swanson *et al.*³⁶

Abstract: *A huge increase in the incidence and prevalence of chronic diseases has been reported in the United States (US) over the last 20 years. Similar increases have been seen globally. The herbicide glyphosate was introduced in 1974 and its use is accelerating with the advent of herbicide-tolerant genetically engineered (GE) crops. Evidence is mounting that glyphosate interferes with many metabolic processes in plants and animals and glyphosate residues have been detected in both. Glyphosate disrupts the endocrine system and the balance of gut bacteria, it damages DNA and is a driver of mutations that lead to cancer.*

*In the present study, US government databases were searched for GE crop data, glyphosate application data and disease epidemiological data. Correlation analyses were then performed on a total of 22 diseases in these time-series data sets. The Pearson correlation coefficients are highly significant ($< 10^{-5}$) between glyphosate applications and **hypertension** ($R = 0.923$), **stroke** ($R = 0.925$), **diabetes prevalence** ($R = 0.971$), **diabetes incidence** ($R = 0.935$), **obesity** ($R = 0.962$), **lipoprotein metabolism disorder** ($R = 0.973$), **Alzheimer’s** ($R = 0.917$), **senile dementia** ($R = 0.994$), **Parkinson’s** ($R = 0.875$), **multiple sclerosis** ($R = 0.828$), **autism** ($R = 0.989$), **inflammatory bowel disease** ($R = 0.938$), **intestinal infections** ($R = 0.974$), **end stage renal disease** ($R = 0.975$), **acute kidney failure** ($R = 0.978$) cancers of the **thyroid** ($R = 0.988$), **liver** ($R = 0.960$), **bladder** ($R = 0.981$), **pancreas** ($R = 0.918$), **kidney** ($R = 0.973$) and **myeloid leukaemia** ($R = 0.878$).*

³⁴ <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>

³⁵

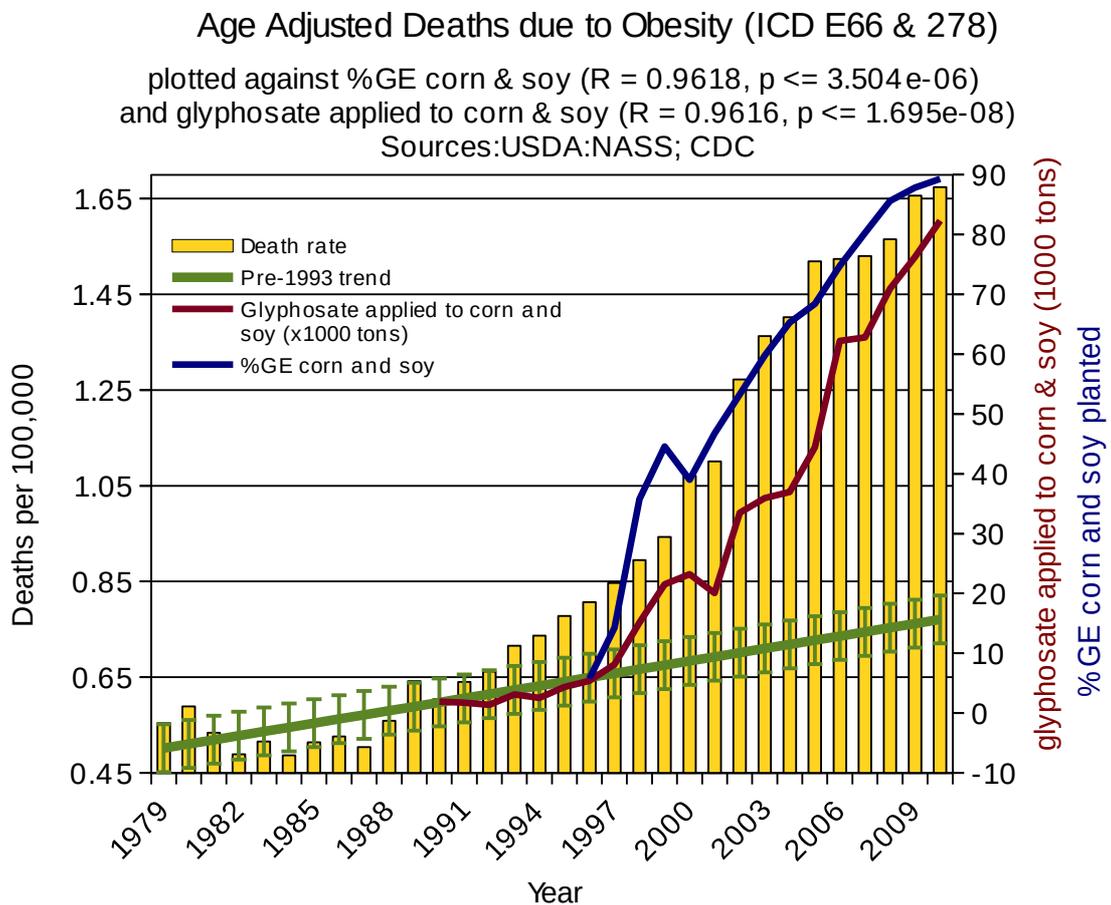
https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides_glyphosate_commission_proposal_final_version.pdf

³⁶ http://www.organic-systems.org/journal/92/JOS_Volume-9_Number-2_Nov_2014-Swanson-et-al.pdf

The Pearson correlation coefficients are highly significant ($< 10^{-4}$) between the percentage of GE corn and soy planted in the US and **hypertension** ($R = 0.961$), **stroke** ($R = 0.983$), **diabetes prevalence** ($R = 0.983$), **diabetes incidence** ($R = 0.955$), **obesity** ($R = 0.962$), **lipoprotein metabolism disorder** ($R = 0.955$), **Alzheimer's** ($R = 0.937$), **Parkinson's** ($R = 0.952$), **multiple sclerosis** ($R = 0.876$), **hepatitis C** ($R = 0.946$), **end stage renal disease** ($R = 0.958$), **acute kidney failure** ($R = 0.967$), cancers of the **thyroid** ($R = 0.938$), **liver** ($R = 0.911$), **bladder** ($R = 0.945$), **pancreas** ($R = 0.841$), **kidney** ($R = 0.940$) and **myeloid leukaemia** ($R = 0.889$). The significance and strength of the correlations show that the effects of glyphosate and GE crops on human health should be further investigated.

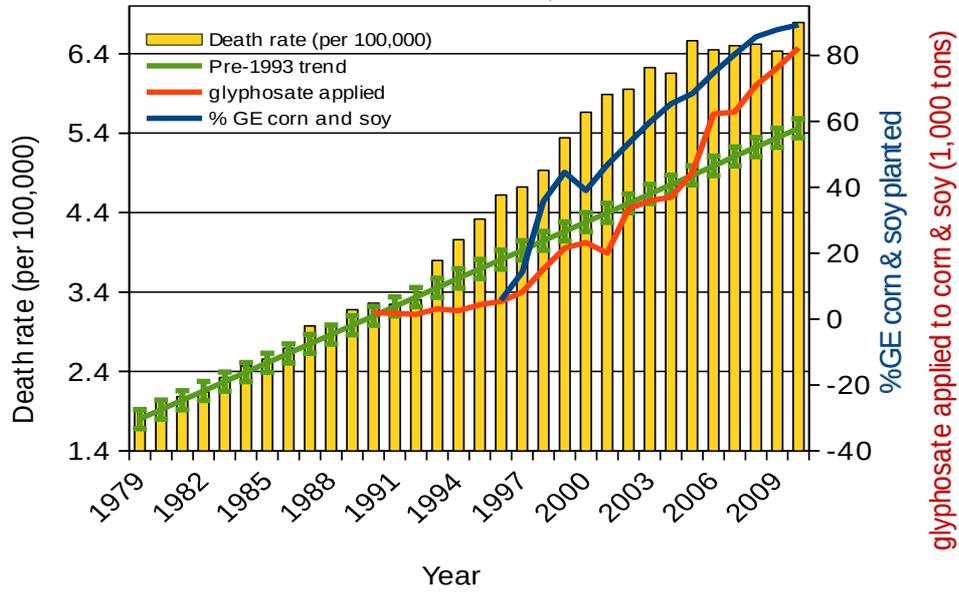
Graphs of correlations between diseases and Glyphosate and GM crops

On the following pages are a small selection of graphs taken from this paper. They are reproduced by kind permission of Dr Nancy Swanson



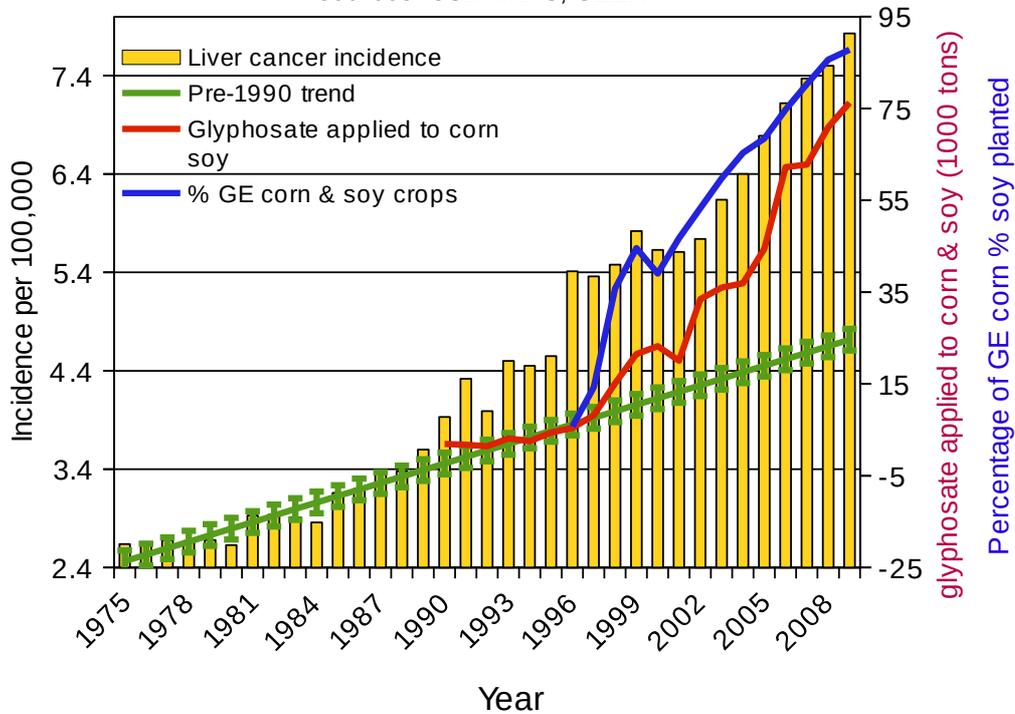
Age Adjusted Deaths from Parkinson's disease (ICD G20 & 332.0)

plotted against glyphosate use on corn & soy ($R = 0.8754$, $p \leq 1.631e-06$)
and percent GE corn & soy planted ($R = 0.9516$, $p \leq 5.398e-06$)
sources: USDA:NASS; CDC



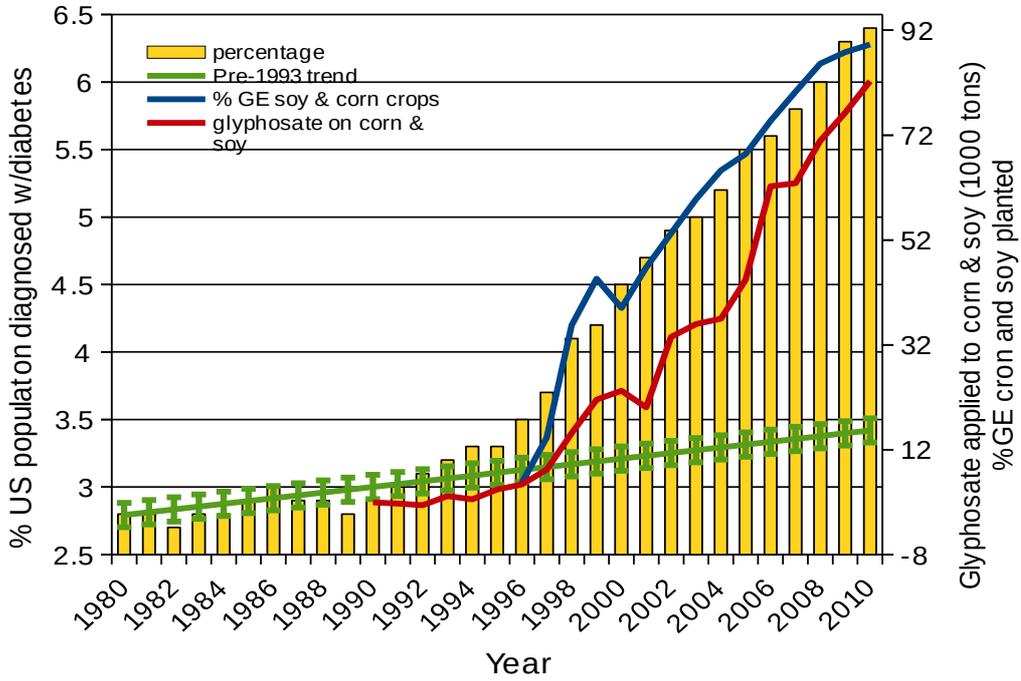
Liver and Intrahepatic Bile Duct Cancer Incidence (age adjusted)

plotted against glyphosate applied to corn & soy ($R = 0.9596$, $p \leq 4.624e-08$)
along with %GE corn & soy planted in U.S. ($R = 0.9107$, $p \leq 5.402e-05$)
sources: USDA:NAS; SEER



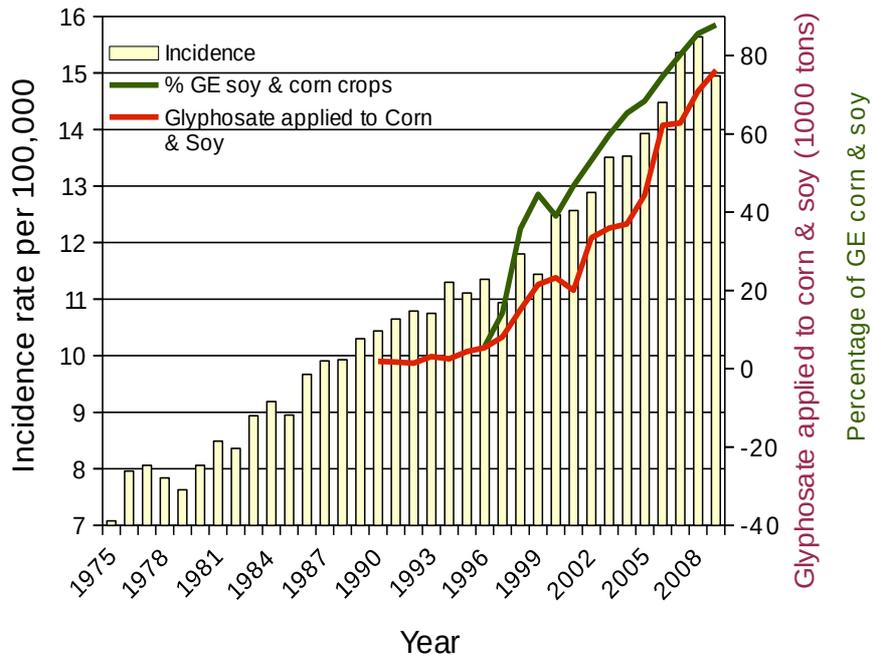
Prevalence of Diabetes in US (age adjusted)

plotted against glyphosate applied to corn & soy ($R = 0.971, p \leq 9.24e-09$)
 along with %GE corn & soy grown in US ($R=0.9826, p \leq 5.169e-07$)
 sources: USDA:NASS; CDC



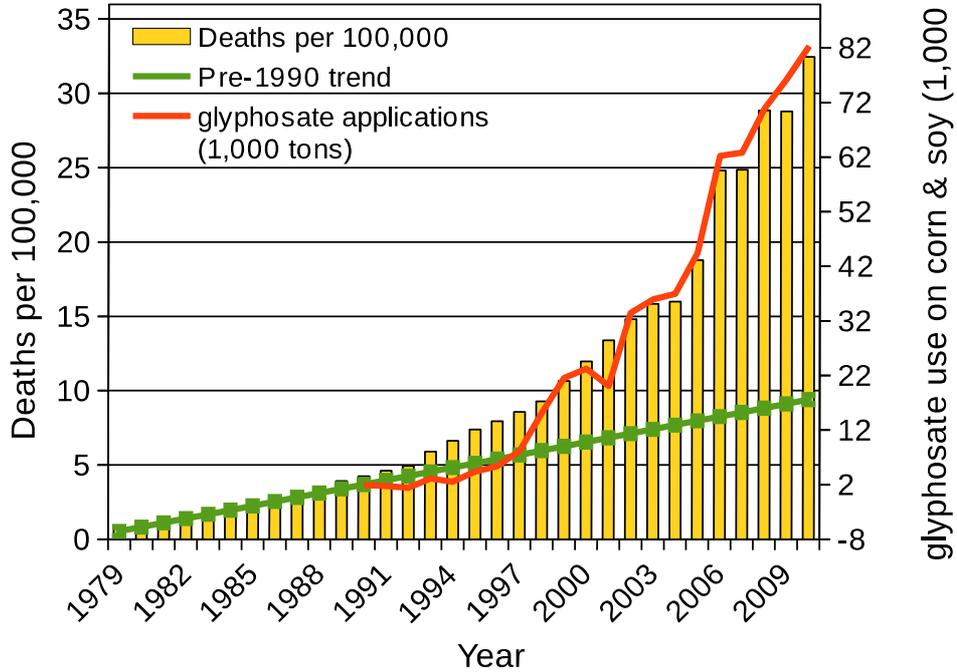
Age Adjusted Kidney and Renal Pelvis Cancer Incidence

Plotted against glyphosate applied to corn & soy ($R = 0.9734, p \leq 1.98e-08$)
 along with %GE corn and soy planted in U.S. ($R = 0.94, p \leq 1.978e-05$)
 sources: USDA:NASS; SEER



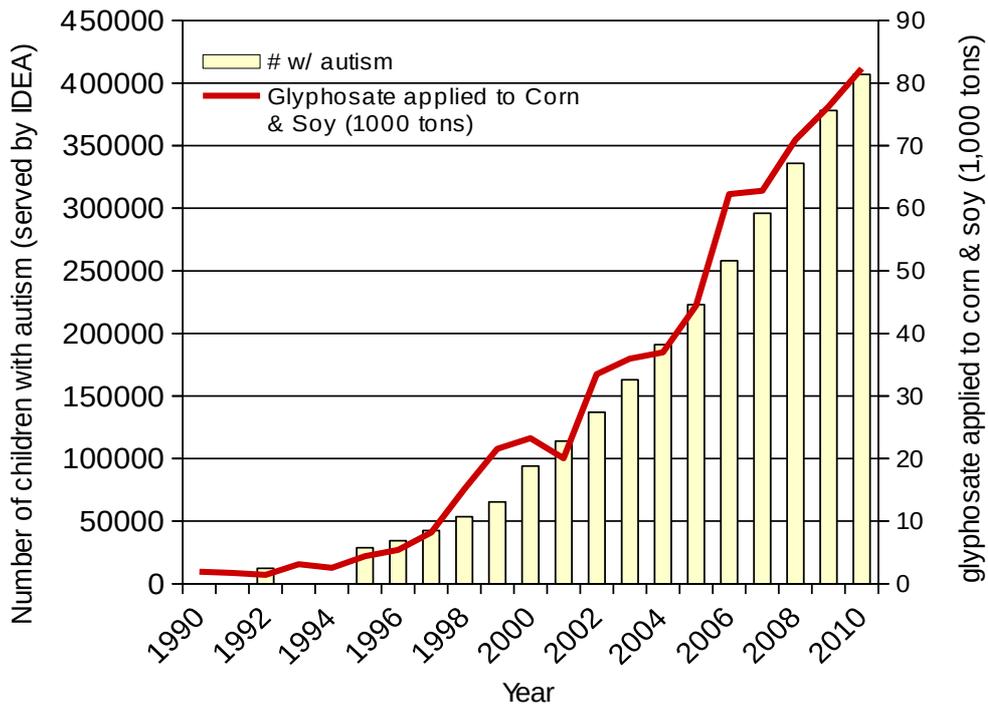
Age Adjusted Deaths from Senile Dementia (ICD F01, F03 & 290)

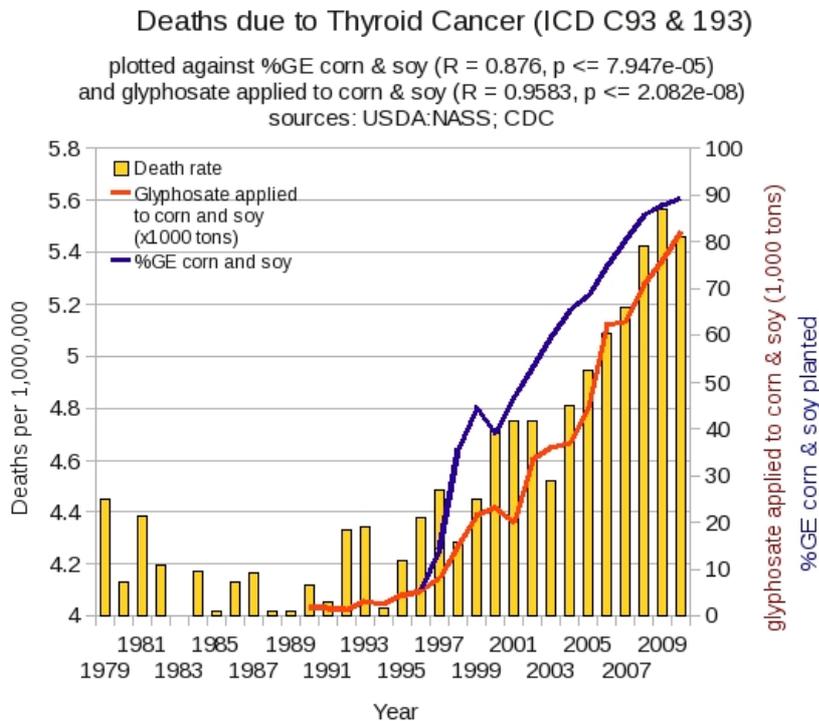
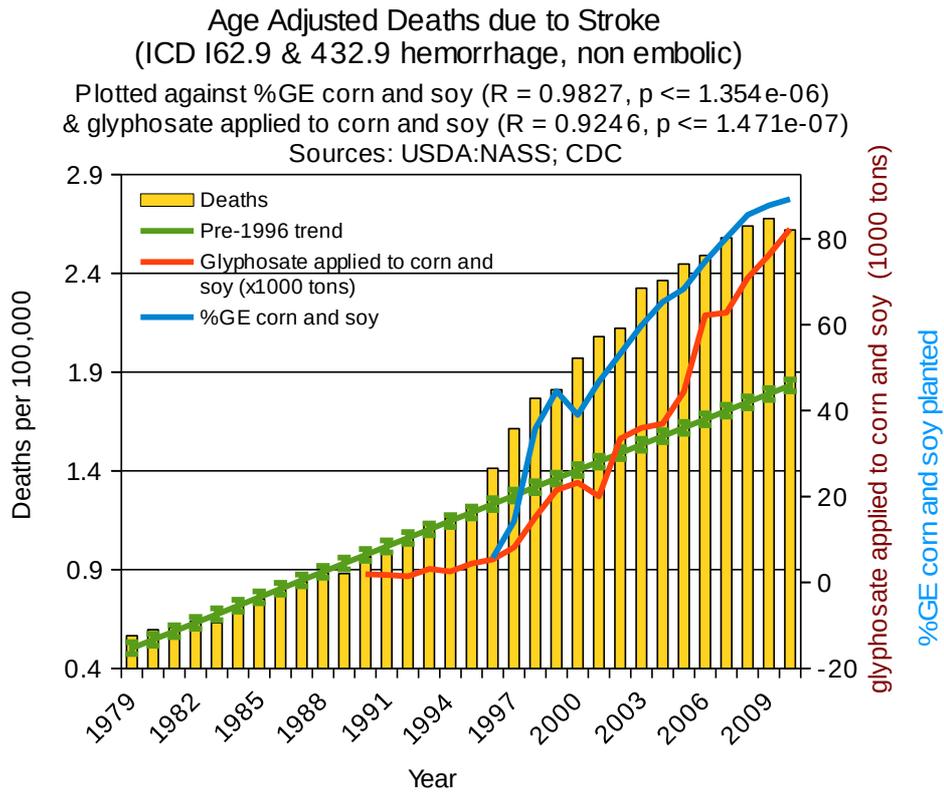
Plotted against glyphosate use on corn & soy
($R = 0.9942$, $p \leq 1.822e-09$)
Sources: USDA:NASS; CDC



Number of children (6-21yrs) with autism served by IDEA

plotted against glyphosate use on corn & soy ($R = 0.9893$, $p \leq 3.629e-07$)
Sources: USDA:NASS; USDE:IDEA





Graph 6 Deaths due to Thyroid Cancer plotted against glyphosate applied to corn and soy and % GE corn & soy planted in the US By kind permission of Dr Nancy Swanson. Data from USDA and US CDC.