

Mounting threats to GM safeguards

At the time of writing we are still waiting for the UK Government's Department for the Environment, Food and Rural Affairs (Defra) to publish a report on their recent [Consultation on the Regulation of Genetic Technologies](#) (*Thin Ice 58* and *Thin Ice 57*). However, a number of other developments suggest that, whatever the balance of views submitted to the consultation, vital GM safeguards are under threat, especially when it comes to newer gene (or genome) editing techniques.

In July, the Food Standards Agency (FSA), which has responsibility for food safety, labelling and other issues in England, Wales and (with some differences) Northern Ireland, published the results of recent research it commissioned on public perceptions of gene edited food. The study found that shoppers want "thorough regulation and transparent labelling" of gene edited GMOs. We agree wholeheartedly, of course, but there is rather more to consider with this particular report.

The study found low general awareness and very low knowledge of gene edited food. That isn't a surprise, but it means that the materials and language used in the qualitative study (in which a small number of participants take part in extended



discussions and other activities) were hugely influential in forming the views expressed and reported on. From what we have seen these focused on the misleading idea that gene editing is very different from genetic modification (GM), as well as the disputed claims that these new techniques are very precise and produce results that "could also be achieved using traditional breeding". As we have reported frequently before, gene editing is more targeted than older GM techniques but not necessarily more accurate, with many examples

of off-target genetic changes and unexpected effects. In this context it is hardly surprising that one of the ['key findings' published by the FSA](#) is that "most consumers felt it would be appropriate to regulate GE foods separately from GM foods." However, we are cheered by the linked conclusion that "At the same time,

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New funding for GM Freeze
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Burnt-toast GM wheat gets go-ahead

Just as we were putting this issue of *Thin Ice* together, Rothamsted Research [received consent](#) for an open field trial of their latest experimental GM wheat plants. Apparently developed for those who are unable to use a toaster properly,

the "low acrylamide" wheat has altered DNA that reduces the production of a chemical that may cause cancer but is associated with burnt toast rather than sensibly prepared wheat products ([Thin Ice 58](#)).

The public consultation on the trial

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many felt regulation should be just as thorough as for GM.”

In July, the much-anticipated [National Food Strategy](#) was published. Commissioned by the Westminster Government and led by entrepreneur Henry Dimbleby, the plan is ambitious and has been largely welcomed by charities and campaign groups working in food and farming. It proposes sugar and salt taxes; extensions to the free school meals and healthy start schemes; mandatory reporting for large food companies and much more that we all might support. Less welcome, however, is a recommendation that “Defra should put an additional £50m towards a commercial innovation “cluster” to develop, test and scale up alternative proteins”. Reading between the lines – informed by comments in the press and reported discussions with the National Food Strategy team – we understand this to support the development of lab-produced proteins which are highly likely to involve genetically modified micro-organisms. Such developments are still little more than early experiments, but they are gaining support from high profile “eco-modernists” including Mark Lynas, whose enthusiasm for all things GM

is matched only by the number of paid speaking engagements he has secured by talking about it.

An entrepreneurial approach to technological innovation also lies at the heart of a [chilling report](#) published by the Government’s Taskforce on Innovation, Growth and Regulatory Reform (TIGRR) in June. The taskforce’s brief was to “identify and develop proposals across a range of areas that will drive innovation, growth and competitiveness through regulatory reform”. Their report includes proposals that the UK Government should “actively support research into and commercial adoption by UK farmers and growers of gene edited crops”. Extraordinary claims are made about the potential benefits of this approach, so we were not surprised to learn that the stakeholders consulted during the development of the report include a number of GM developers, agri-tech corporations and business representatives, but no environmental NGOs or consumer bodies.

A [public consultation is now open](#), covering aspects of the TIGRR report and other related proposals under the title *Reforming the framework for better regulation*. The consultation is complex and covers a wide range of issues so we are considering how best we can respond and support others to

do the same before the closing date of 1 October 2021. If you would like to hear what we come up with in time to take part yourself, please make sure you are signed up to receive our emails, at www.gmfreeze.org/emails

New campaign against GM babies

A new international network of concerned citizens and activists has launched with the aim of achieving a global ban on human cloning and germline genetic engineering (changing human DNA in ways that can be inherited, as opposed to existing gene therapies). *Stop Designer Babies* is partly a response to the birth, in 2018, of the world’s first GM babies in China. Despite widespread condemnation of the “rogue scientist” involved in that case, there has been no global agreement to ban the use of GM or cloning in humans. GM Freeze focuses on the use of genetic engineering in food and farming so please visit the network’s website at stopdesignerbabies.org if you would like to get involved in campaigning against human GM.

New funding for GM Freeze

We are pleased to report that GM Freeze recently secured a new two-year funding award from Esmée Fairbairn Foundation.

All but the newest *Thin Ice* readers will know that GM Freeze has faced significant financial challenges in recent years, as long-standing grant funders decided they were no longer able to support work that challenges the use of GM in food and farming. The generosity of our members and supporters has kept us afloat ([Thin Ice 55](#)) but we still need [your support](#) as the new grant doesn’t cover all of our costs. However, we are now able to confidently plan and build on the work that you have told us matters so much to you.

[Esmée Fairbairn Foundation](#) is one of the largest independent

grant-makers in the UK and aims to improve our natural world, secure a fairer future and strengthen the bonds in communities in the UK. We are delighted to have received their seal of approval, as well as their funding, and are thrilled that your faith in us will now be rewarded with a full programme that focuses on working with others to make the case for effective UK regulation of all GMOs in food and farming.



Esmée
Fairbairn
FOUNDATION

Learn more about gene drives

Save our Seeds, an initiative of the German Future Foundation for Agriculture, has published a comprehensive new report as part of its Stop Gene Drives campaign. [Gene Drive Organisms: A New Dimension of Genetic Engineering](#) is published in German and English. It provides an overview of how gene drives overrule the laws of natural inheritance to rapidly spread particular genes and traits through whole populations; their potential applications; and the scientific debate about the associated known and unknown risks. It also considers regulatory issues in Germany, the European Union and on the global stage. Although the report does not cover UK-specific issues, it is a useful addition to our understanding of this extraordinary technology with the potential to wipe out whole species ([Thin Ice 50](#)).

Review of the year

April 2020 to March 2021 was an extraordinary time for us all. We look forward to welcoming members and supporters to our [Annual General Meeting](#) to find out more about how our financial year started under the threat of imminent closure and ended on much more positive ground. Here we share a summary of key developments and the headline figures to give you a flavour of our Annual Report and Accounts which can be found [on our website](#) or sent out in the post if you contact us on info@gmfreeze.org or 0845 217 8992.

Defending GM safeguards

Political moves to deregulate newer GM methods began last summer during debate about the Agriculture Bill. In January, just days after the end of the Brexit transition period, the Government launched its [Consultation on the Regulation of Genetic Technologies](#), which closed to submissions in March. Thanks to funding from the Farming the Future collective, we worked intensively with our colleagues at Beyond GM to ensure that the case for robust regulation of ALL forms of genetic engineering was heard loud and clear. We also used the context of the consultation to start building relationships with the UK politicians and civil service teams that have taken over responsibilities previously held in Brussels.

Improving the way we talk about GM in food and farming

In April we brought a group of key campaigners and civil society representatives together to learn about the unhelpful ways that discussion around GM is framed. We identified new, more effective ways to talk about why GM has no place in a responsible, fair and sustainable food system. This work, funded by the Network for Social Change, continues and you can visit www.gmfreeze.org/framed to find out more.

Building an effective campaign network

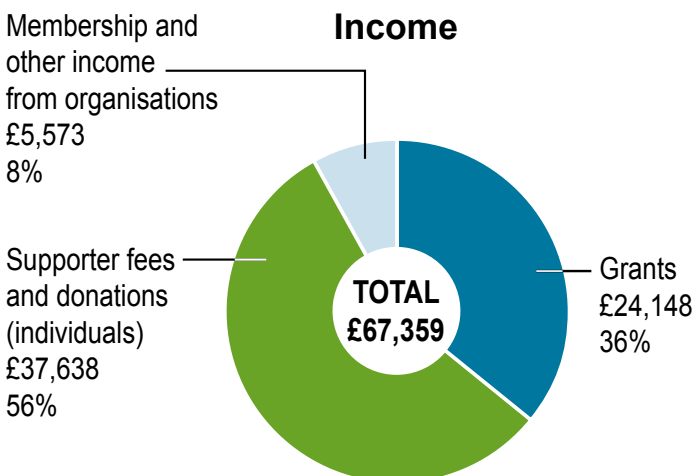
In 2019/20 we received funding from Esmée Fairbairn Foundation to explore the feasibility of establishing a new civil society coalition to campaign for effective UK regulation of GM in food and farming. For various reasons

we concluded this year that, while effective high-profile work to uphold and develop GM regulation is essential, a new coalition is not the way to make that happen. We need to collaborate, of course, but in a more nimble and responsive way than a formal coalition would allow. We shared our conclusions with the funder and are pleased to report (see page 2) that they have put their faith in our approach.

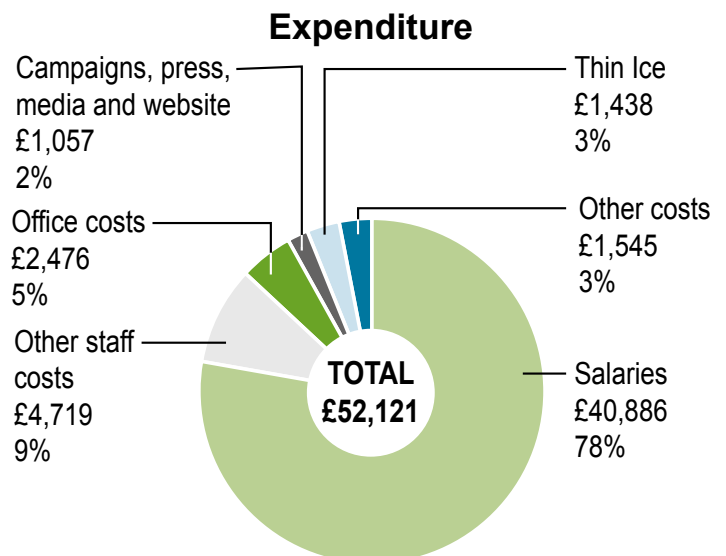
Difficult times and positive outcomes

The COVID-19 pandemic and the public health measures established to manage its impact affected us all, but GM Freeze suffered less disruption than most. Our staff team are largely based at home, and we have long used online meeting platforms, so we adjusted quickly. However, we faced our own troubles and started the financial year with an appeal to raise £25,000 to avoid closure. The response from our supporters was phenomenal, with over £37,000 received from generous individuals this year – a more than four-fold rise on 2019/20. Alongside small core grants from JMG Foundation and the A Team Foundation (together with project grants noted above), the new income allowed us to operate at full capacity throughout the year. Thank you all for your ongoing support.

Our finances 2020/21



£6,972 of grant income received in previous years was brought forward to spend in 2020/21
 £3,764 of grant income has been carried forward into 2021/22 for ongoing work.
 Please note: all figures are provisional, pending final approval by the GM Freeze Management Committee



Members and supporters are warmly invited to join the GM Freeze AGM, which will be held online from 10am to 12noon, on Wednesday 3 November. The formal business will be followed by a creative session on *Messaging Dos and Don'ts*. Please email info@gmfreeze.org or call us on 0845 217 8992 for details of how to join the Zoom meeting online or by telephone.

INTERNATIONAL NEWS



India

GM cotton farmers in Vidarbha are seeing their crops attacked by the pink bollworm once again, despite their genetic modification being designed to kill the devastating pest. The insecticide crops, which produce Bt toxins that are supposed to target key pests, are becoming less and less effective as the bollworm evolves resistance. Farmers who have been using the GM seeds have faced regular infestations for at least the last four years. Pesticide spraying is expected to increase in response and the Indian press report that farmers have asked their government to step in.



Philippines

GM "poster child" Golden Rice reached a milestone in July with a biosafety permit issued for commercial cultivation

in the Philippines. Engineered to produce beta-carotene (which the body can convert into Vitamin A), the rice has attracted controversy for over 20 years and been beset by technical problems including low yield and breakdown of beta-carotene after harvest. It is the first GM rice approved for commercial cultivation in South and Southeast Asia but will initially be grown in very small quantities. Filipino farmer-scientist organisation MASIPAG has condemned the decision and called for farmers and citizens to protest. National Coordinator, Cris Panerio said that *"the billions spent on the Golden Rice project would have been put into better use if it was utilized for genuine support to diverse local production of food... Genetically modifying our staple food would put the health, food security and livelihoods of our farmers at grave risk. There is no gold in golden rice."*



China

Researchers at the Chinese University of Hong Kong have successfully used non-GM techniques to develop salt- and drought-tolerant soya which can now be grown by farmers in Gansu province. The result of two decades of collaboration between academics and soya breeders, the breakthrough involved marker assisted selection in which modern understanding of the genome is deployed in ways that work with nature. Drought- and salt- tolerance are often claimed as potential applications for GM technology. However, like many desirable traits, the ability to thrive in salty soil or with little water is controlled by a complex group of genes so the GM approach of attempting to overpower nature by changing one gene at a time just isn't up to the job.

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application received a total of 95 submissions. These included the fully referenced objection [from GM Freeze and 27 other organisations](#) as well as individual responses from a large number of our members and supporters. Thank you for stepping up – whether you donated to our special trial campaign fund or submitted your own response, you have helped ensure that the Environment and Farming Ministers know that public objection to GMOs is alive and kicking.

The Government's Advisory Committee on Releases to the Environment (ACRE) dismissed many of the concerns raised through the consultation as irrelevant due to the scale of the trial and the containment measures that will be employed. Frustrating as this is, your efforts are not wasted as this influential body, which has long advised Ministers on field trial applications, will now also play a key role in assessing applications for commercial GM crop cultivation in the UK. Their report notes that many of the issues ruled out of scope for the trial would need

to be considered in depth before the GM wheat could be grown at scale or allowed into the food chain. As such assessments will now fall to ACRE, it is helpful for them to know that they will have their work cut out!

Thin Ice allows us to give you GM Freeze's analysis of key GM issues but for as-it-happens news updates, follow us on twitter @gmfreeze and facebook /GMFreezeUK or visit www.gmfreeze.org/emails to sign up for our email list.

GM Freeze is working to help create a world in which our food is produced responsibly, fairly and sustainably. We consider and raise the profile of concerns about the impact of genetic modification. We inform, inspire, represent and support those who share our concerns. We campaign for a moratorium on GM food and farming in the UK. We oppose the patenting of genetic resources.



A referenced version of this newsletter is available online – www.gmfreeze.org/thinice

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We use an 0845 phone number to protect the privacy of our staff, who work from home. Calls to this number will cost 3p per minute plus your telephone company's Access Charge.



www.gmfreeze.org