



## The debate over GM crops is making history

An archive of material from all sides of the UK genetic-modification controversy is up and running and welcomes contributions, says **Vivian Moses**.

**W**hen does history begin? Can we anticipate which of our contemporary events the historians of the future will find most interesting? A century from now, will there be universal acceptance of genetically modified (GM) crops, with little sign of the protest and controversy that has surrounded them until now? Or will those objections have killed off the development of what was once seen as a promising new technology?

Either way, events of the past two decades will be of great interest. Future historians could view this period either as signalling the birth of opposition to GM crops or as offering a case study of how and why that opposition was once significant — and how it was overcome.

Hoping to help those future historians, I and others have gathered a historical archive of material relevant to the debate over GM crops and the food derived from them.

It became clear more than ten years ago, quite early in the debate, that an interesting phenomenon was unfolding. A new set of scientific technologies had provoked widespread reactions, many of them antipathetic for a wide variety of reasons (including health risks), which themselves became topics for fierce argument and discussion.

The science underpinning the deployment of the technology and the safety of GM products was attested by most of the scientific community and essentially all of the official agencies internationally responsible for food and environmental safety. Opposition, it seemed to most scientists, was clearly not based primarily on the validity of scientific findings, although many opponents claimed that it was. Those counter-arguments were rejected by most scientists, who perceived them as motivated by political, commercial and other interests for which scientific validity was, at best, of secondary importance.

This was not the first vigorous public reaction to new technologies. Innovation is often accepted with alacrity — think of the Sony Walkman and the iPhone — but sometimes causes trouble. Riots in nineteenth-century London against compulsory smallpox vaccination of children (many parents then, as now, felt they should have the choice) were followed by objections in Oklahoma to the electric telegraph connection with New Orleans, which would bring bad news and encourage gambling. There were (and remain) objections to milk pasteurization and to mobile-phone transmitters, not to mention nuclear power.

The effort to prepare an archive of the GM debate began in 2008, when it became clear that the GM crop and food phenomenon would be a useful way to study societal reactions to new technologies.

Whatever the eventual outcome of the debate, we realized that there would be many lessons to learn about how (and how not) to introduce a new technology, as well as whether (or not) it might be wise to do so. Genetic modification would be an important subject for future, as

well as contemporary, study — but much would be lost if records and ephemera of all sorts were not retained under safe conditions.

We cannot know in advance what aspects of GM crops will be of interest to future scholars, so it is best to keep as much material as possible. Although archives are usually established in retrospect, as and when historical subjects attract interest, we set out to do so in prospect, knowing from the outset that we have an interesting and pertinent phenomenon to record. It would be presumptuous to estimate the archive's future value, but we did predict that, without it, a time would come when its absence would be regretted.

With collaboration from the British Library, we began a project with the Science Museum in London to find and preserve eligible papers, films, tapes, disks, websites, equipment and more. (We have no facilities for storing biological material.)

Much of the vulnerable material held by individuals needed to be secured before it was thrown away. By 2008 it was already late: filing cabinets are periodically cleaned out. Nevertheless, much interesting material was still held by scientists and other academics, industry, farming interests, government, campaigners, the media and others.

We planned a global archive, but talking to colleagues in the United States and elsewhere quickly showed that this was overambitious. Moreover, the Science Museum's remit is to collect material mainly from UK sources. So the archive focuses on the debate in Britain, which has been particularly strong and for which a large amount of material is available. The archive contains important records, including correspondence, from researchers, campaigners and the public-relations firms used

by the biotech companies to try to counter opposition.

Space and facilities had to be organized before the archive became public, but it is now finally open for use, housed at the Science Museum's Wroughton site, near Swindon (see [go.nature.com/2btqdk1](http://go.nature.com/2btqdk1)). It includes dozens of box files across 23 metres of shelf space and includes correspondence on the controversial publication of research that claimed to show health impacts of GM potatoes. Pending funding to prepare a full catalogue, a broad listing of contents is available at [go.nature.com/2cjtjq](http://go.nature.com/2cjtjq). (Click to search Science Museum, London; enter 'genetic' in the search box; select 'Title' in 'Sort By' and finally click on 'Search'.)

We continue to seek relevant material, and hope that UK colleagues will contribute more to the Wroughton collection and that others around the world will be inspired to establish GM archives in their own countries. We live in interesting times. Let's preserve them. ■

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