

ACADEMIA

Under Lock and Key?

Dr. Magdalena Fikus

PAS Institute of Biochemistry and Biophysics, PAS Council for Science Promotion



These days, a kind of information embargo is increasingly being applied, to ensure that only selected scientific information is accessible only to selected recipients at the right time.

Censorship in science can take many forms. I first encountered it while on a scholarship at Stanford University in 1972. A group of talented scientists gathered around Paul Berg suddenly seemed to be isolating themselves from the rest of their friendly classmates. They would gulp down a coffee in the library and then disappear into their lab, as a mysterious group clearly “up to something,” even working long nights. They were doing something they were very excited about. Half a year later the world learned their secret: they invented a method of stitching together genes from different sources, which even then was being called “genetic engineering.”

As these pioneers fully realized, Genetic Engineering (officially known as *in vitro DNA recombination*) carried unprecedented theoretical and practical implications. It would bestow great prestige on its creators (winning Paul Berg and Herbert Boyer a Nobel Prize in 1982) and it would also have vast commercial applications: in the production of drugs, energy, new strains of microorganisms, new animals, plants, and in the treatment of incurable diseases. All these future possibilities became a reality, surpassing even our wildest expectations – making the previous scientific self-censorship something completely understandable.

Five years later, when scientists at the University of California began working on obtaining human insulin in bacteria, they closed off their part of the lab and locked the door with a combination lock. Today, locked doors are the norm, but at that time no one had ever heard of such security precautions, apart from at military institutions.

A few years later, when I became active in promoting science, Polish journalists began to call with questions about sensational scientific news (which nevertheless somehow rarely end up on the front pages of newspapers), which they had to wait to publish as it was still “under embargo,” until the first official announcement came from the institution that made the discovery. Sometimes, imploring me to exercise abso-

lute discretion, they would send me a file containing this type of news, because although they knew that they were not allowed to disseminate it, they needed additional clarification to understand it. Such an embargo was imposed by scientific institutions on information about the discovery of a new planet (Caltech), the article by G.E. Seralini on the harmful effects of GMOs on rats (later discredited anyway), and on the detection of gravitational waves in early 2016. In all these cases, self-censorship is again quite understandable.

But a few years ago, a different, more sinister type of information embargo began to be applied in scientifically strong countries, ensuring that only selected scientific information is accessible only to selected recipients at the right time. The technique involves inviting only a dozen selected media representatives to press conferences, who in return agree not to challenge any information they obtain there. As a result, the first press articles about what was actually achieved in the labs are fully controlled by the information source (in 2011, one journalist described such dealings as a pact with the devil). This is how government agencies typically operate, such as the US Food and Drug Administration, which approves all products for public use. What must be going on behind the scenes here becomes a bit clearer if we take a closer look at the topics subject to such monitoring: assessing the risks of e-cigarettes, regulations applying medical devices, chemical accidents, public health, and labeling of food products.

The select group of journalists usually includes 10–12 representatives of chosen media outlets: CBS, NBC, CNN, *The Washington Post*, *The Wall Street Journal*, and *The New York Times*. No one admits to the existence of any such confidentiality embargo, but occasionally one of the journalists breaks his or her silence and publishes bitter grievances. The agencies so attacked refute the claims and attempt to set the record straight. And they simply continue to apply the embargo. ■