



August 4, 2014

To whom it may concern,

On behalf of Food & Water Watch, a nonprofit consumer advocacy organization, I respectfully submit comments on the National Research Council's (NRC) announcement of the committee members for its new study, "Genetically Engineered Crops: Past Experience and Future Prospects."

We commend the NRC for taking on this timely, important scientific topic, but we do not believe the proposed committee has the expertise to respond to the broad charge laid out in this study, which includes examining questions related to "food safety, environmental, social, economic, regulatory, and other aspects." Critically, we do not believe the proposed committee is "reasonably balanced so that the committee can carry out its charge objectively and credibly," as the NRC states it should be.

The NRC has chosen to include numerous scientists who work on promotion or development of genetically engineered (or GMO) crops and who have financial ties to biotech companies, which have an economic and political agenda in this debate. The NRC should appreciate the bias such economic ties and professional activities can engender. Science does not exist in a vacuum, free of political and economic influence, and the scientific debate surrounding biotechnology in agriculture, to be sure, has been subject to such influence. While we understand and appreciate that finding totally independent scientists, who have relevant expertise related to GMOs, is difficult, we feel that if the NRC is going to include partisan perspectives, the committee must be bi-partisan. That is, if the NRC is going to include scientists who are reasonably likely to advocate a favorable position on GMOs, it should include scientists who are reasonably likely to offer a critical perspective. Such a balance of perspectives is missing from the current committee.

Previous NRC reports on genetically engineered crops have been subject to industry influence,¹ which may have weakened, if not changed, the findings. We implore the NRC to remove all industry representatives from its activities and to rigorously and broadly apply conflict of interest rules. At a minimum, the NRC must provide a robust counterpoint to the presence of GMO developers and promoters on the currently proposed committee.

Proposed Committee Members

We want to applaud the NRC for the inclusion of Lawrence Busch, Timothy Griffin, Fred Gould and Carol Mallory-Smith on the committee—all whom have relevant expertise and research experience, no obvious ties to any partisan interests (whether industry or otherwise), and appear perhaps as independent as one can in such a highly politicized debate as exists around GMOs.

By contrast, we question the inclusion of the scientists and experts listed below. We feel that their ties to industry, their work in GMO development, and/or their demonstrated pro-GMO stances present a bias that the NRC must either strike from the committee or counterbalance through the inclusion of experts who are critical of GMOs. Though none of these proposed

members appear to currently work *directly* for industry, their work is often connected to biotechnology companies and aligned with the goals of industry, notably to advance regulatory and market acceptance.

-- Though Karen Hokanson does not work directly for a biotech company, her career has been closely aligned with the ambitions of the biotechnology industry. According to the biography provided by the NRC, her “primary consulting currently is as a biosafety adviser... at the Donald Danforth Plant Science Center,” a research center funded by Monsanto, whose corporate headquarters is just across the street.² The Danforth Center uses its platform as a scientific institution to advocate a pro-GMO position in a variety of influential forums.³ Hokanson has worked extensively on the Program for Biosafety Systems project, a diplomacy effort to promote acceptance of GMOs abroad, mainly in Africa, that is directed by Judy Chambers,⁴ a prominent GMO advocate and former Monsanto executive.⁵

-- Robert Whitaker now works for the Monsanto-sponsored Produce Marketing Association⁶ and previously was employed at the DNA Plant Technology Corporation, which worked on developing GMO fruits and vegetables.⁷

-- Richard Dixon has significant industry ties, as well as what appears to be personal economic interests in the success of GMOs. Dixon’s name is attached to dozens of patents, including those related to methods for genetic engineering and specific GMO crop varieties, potentially giving him a financial interest in seeing greater acceptance of and/or deregulation of genetic modification, which a favorable NRC report could help.⁸ On top of these patents, Dixon has been awarded millions of dollars in research grants from industry interests, and some of these grants are still active.⁹ He has consulted for Monsanto on at least four separate occasions.¹⁰

-- C. Neal Stewart has consulted for Dow Agrosiences, Syngenta Seeds and Syngenta Biotechnology.¹¹ He has presented invited seminars at an array of biotechnology companies including BASF, Bayer, Cargill, Dow, Monsanto, and Syngenta and within the past decade, has received research funding from Monsanto.¹² His name is attached to several patents (some pending),¹³ many of which either directly pertain to or aid in the genetic modification of plants.¹⁴

-- One of the few NGO representatives on the committee is Peter Kareiva from the Nature Conservancy, whose biography from the NRC indicates little relevant work on GMOs. In his current position at the Nature Conservancy, the only evident work on GMOs is a blog in which he expresses a decided openness to GMOs¹⁵ that was favorable enough to attract the attention of pro-GMO activists who re-posted the piece.¹⁶ The Nature Conservancy maintains strong links to industry: Monsanto and Dow representatives sit on the organization’s business council,¹⁷ while Bunge, Cargill, and Dupont are all listed on the Nature Conservancy’s website as companies with which it works.¹⁸ There are many NGOs with specific expertise related to GMOs—and personal relationships with farmers, for example—that would be far better representatives for the committee.

We question whether the invitation of these proposed committee members, who seem likely to offer a favorable review of GMOs, may have resulted from the actions of the industry-heavy NRC Board on Agriculture and Natural Resources. The NRC board includes industry

representatives from Nestle Purina Pet Care, Monsanto, Cargill and Novus International.¹⁹ Clearly, these companies have an economic and political agenda in the GMO debate, and their participation in such a high and influential level of NRC presents the appearance of a conflict of interest. The biggest biotechnology and food companies spend millions of dollars lobbying Congress, donating to political campaigns, funding and authoring scientific studies, attacking unfavorable research, and sponsoring various aspects of academia. The voice of these companies already has an outsize presence in the GMO debate; these companies do not need the additional platform of the NRC.

Alternatives

In contrast with the several industry-affiliated scientists on the proposed committee, we do not see equal representation from, for example, researchers and scientists who might be critical of industrial practices around GMOs. During the NRC's call for committee member nominations in Spring 2014, Food & Water Watch joined other NGOs in nominating Michael Hansen of Consumers Union, and Doug Gurian-Sherman and Bill Freese of Center for Food Safety, yet they were not selected. The absence of these kinds of experts leaves the committee woefully unbalanced and missing critical perspectives.

We continue to advocate for their inclusion on the committee, and we also recommend several academics who have published groundbreaking, new research on GMOs, including David Mortensen of Penn State University and David Shubert of the Salk Institute. University of California Professor Ignacio Chapela would be another good addition, as he has conducted groundbreaking, independent research on GMOs;²⁰ Chapela also has other first-hand experience relevant to the current NRC study, industry's influence in sponsoring favorable research and attacking unfavorable research on GMOs.²¹

Another critical perspective completely missing in the NRC's committee selection is that of farmers. This includes the countless farmers who have jettisoned GMOs because of weed resistance or the organic and non-GMO farmers, who have had to deal with pollution of their farms from GMOs and associated agrochemicals from neighboring farms. Percy Schmeiser, a Canadian farmer, is one high-profile example, but there are many others the NRC could ask to participate. We recommend Ben Burkett, President of the National Family Farmers Coalition. There is no doubt that NRC could also find pro-GMO farmers to be a part of its committee, but, again, it is critically important that NRC seek a balance of perspectives.

As the National Academy of Sciences was established by Congress to provide "independent, objective advice to the nation on matters related to science and technology,"²² the organization owes it to the public to dramatically alter its current committee to include a balance of perspectives. The large representation of industry-aligned researchers, GMO developers and biotechnology advocates—and the absence of GMO critics—puts the NRC project off on a very wrong foot that undermines public confidence in the Council's work.

Sincerely,



Wenonah Hauter, Executive Director

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- ² Donald Danforth Plant Science Center. News Release. “Monsanto fund makes \$15 million gift to Danforth Center.” September 5, 2006; Gustin, Georgina. “Former anti-GMO crusader speaks at Donald Danforth Plant Science Center.” *St. Louis Post-Dispatch*. June 13, 2013.
- ³ Beachy, Roger. President, Donald Danforth Plant Science Center. “The role of biotechnology in combating poverty and hunger in developing countries.” Testimony before Subcommittee on International Economic Policy, Export and Trade Promotion of the Committee on Foreign Relations, U.S. Senate. July 12, 2000; Donald Danforth Plant Science Center. “The Top 5 Lies about Biotech Crops.” Available at <http://www.danforthcenter.org/news-media/roots-shoots-blog/blog-item/The-Top-5-Lies-About-Biotech-Crops>. Accessed July 28, 2014 and on file with Food & Water Watch; Gustin, Georgina. “Former anti-GMO crusader speaks at Donald Danforth Plant Science Center.” *St. Louis Post-Dispatch*. June 13, 2013.
- ⁴ Program for Biosafety Systems. “Judith A. Chambers.” Available at <http://pbs.ifpri.info/pbs-staff/judith-a-chambers/>. Accessed July 28, 2014 and on file with Food & Water Watch; Program for Biosafety Systems. “About Us.” Available at <http://pbs.ifpri.info/about/>. Accessed August 4, 2014.
- ⁵ Program for Biosafety Systems. “PBS Selects new director.” Blog of the Program for the Biosafety Systems. Available online at <http://pbs.ifpriblog.org/> and on file. June 18, 2009. Accessed August 1, 2014; LinkedIn. “Judy Chambers.” Available at <https://www.linkedin.com/pub/judy-chambers/b/9aa/548>. Accessed July 29, 2014 and on file with Food & Water Watch.
- ⁶ Produce Market Association (PMA). “Annual Partners.” Available at <http://www.pma.com/about-pma/annual-partners>. Accessed July 28, 2014 and on file with Food & Water Watch.
- ⁷ FDA. Biotechnology consultations on food from GE plant varieties. Event designation 1345-4; Bloomberg Businessweek. “Company Overview of DNA Plant Technology Corp.” Available at <http://investing.businessweek.com/research/stocks/private/snapshot.asp?privcapId=265459>. Accessed July 29, 2014 and on file with Food & Water Watch; LinkedIn. “Bob Whitaker.” Available at <https://www.linkedin.com/pub/bob-whitaker/8/a29/343>. Accessed July 29, 2014 and on file with Food & Water Watch.
- ⁸ University of North Texas. “Dr. Richard Dixon.” Available at faculty.unt.edu/editprofile.php?pid=4677&onlyview=1. Accessed July 29, 2014 and on file with Food & Water Watch.
- ⁹ University of North Texas. “Dr. Richard Dixon.” Available at faculty.unt.edu/editprofile.php?pid=4677&onlyview=1. Accessed July 29, 2014 and on file with Food & Water Watch.
- ¹⁰ University of North Texas. “Dr. Richard Dixon.” Available at faculty.unt.edu/editprofile.php?pid=4677&onlyview=1. Accessed July 29, 2014 and on file with Food & Water Watch.
- ¹¹ University of Tennessee. Charles Neal Stewart, Jr. CV. Available at http://plantsciences.utk.edu/stewart_cv.doc. Accessed July 29, 2014 and on file with Food & Water Watch.
- ¹² University of Tennessee. Charles Neal Stewart, Jr. CV. Available at http://plantsciences.utk.edu/stewart_cv.doc. Accessed July 29, 2014 and on file with Food & Water Watch.
- ¹³ University of Tennessee. Charles Neal Stewart, Jr. Bio Sketch. Available at http://plantsciences.utk.edu/pdf/stewart_bio_sketch_%202014.pdf. Accessed July 29, 2014 and on file with Food & Water Watch.
- ¹⁴ University of Tennessee. Charles Neal Stewart, Jr. CV. Available at http://plantsciences.utk.edu/stewart_cv.doc. Accessed July 29, 2014 and on file with Food & Water Watch.
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¹⁸ The Nature Conservancy. “Working with Companies: Companies We Work With.” Available at <http://www.nature.org/about-us/working-with-companies/companies-we-work-with/index.htm>. Accessed July 29, 2014 and on file with Food & Water Watch.

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²⁰ Yoon, Carol Kaesuk. “Journal raises doubts on biotech study.” *New York Times*. April 5, 2002.

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