Dear Chairman Conaway and Mr. Peterson:

Thank you, again, for the opportunity to testify on the importance of biotechnology the potentially detrimental impacts of mandatory GMO labeling. I really appreciated your questions and the interaction with the Members. As several questions pertained to the recent glyphosate study conducted by the International Agency for Research on Cancer (IARC), please allow me to provide some materials for the record and supplement my response. Glyphosate is the world’s most widely produced herbicide. Hence, the great interest in this chemical.

The IARC concluded that glyphosate is a probable carcinogen to humans, yet noted there is limited evidence of such a link and, as I mentioned at the hearing, the study does not contain any new research. Moreover, the report contradicts the overwhelming consensus by the world’s most respected regulatory authorities and scientific organizations, and the preponderance of all evidence where glyphosate has been found not to present a carcinogenic risk to humans.

- First, and foremost, the IARC results contradict conclusions reached by the Joint Meeting on Pesticide Residues (the Meeting), which is an internationally recognized expert body administered jointly by the United Nations Food and Agriculture Organization and IARC’s parent body, the World Health Organization (WHO). “In view of the absence of a carcinogenic potential in animals and the lack of genotoxicity in standard tests, the Meeting concluded that glyphosate is unlikely to pose a carcinogenic risk to humans.” Joint Meeting of the FAO Panel of Experts on Pesticides Residues in Food and the Environment and the WHO Core Assessment Group, Rome, Italy 20–29 September 2004

- In 2013, the U.S. Environmental Protection Agency (EPA) “concluded that glyphosate does not pose a cancer risk to humans” and “Therefore, a dietary exposure assessment for the purpose of
assessing cancer risk is unnecessary.” 2013 Federal Register Notice (FR 25396, Vol. 78, No. 84, May 1, 2013). The EPA is also conducting a comprehensive re-review, which all chemicals go through every fifteen years, and will consider all new information that is scientifically based.

- Germany’s Federal Institute for Risk Assessment (BfR), acting as Rapporteur Member State for the European Union’s renewal of approval for glyphosate, found that “In epidemiological studies in humans, there was no evidence of carcinogenicity and there were no effects on fertility, reproduction and development of neurotoxicity that might be attributed to glyphosate.” Glyphosate Renewal Assessment Report, Germany as Rapporteur Member State for the European Renewal of Approval for Glyphosate (2015). IARC’s classification, therefore, came as a “surprise” to BfR given Germany’s findings were based on “the most comprehensive toxicological database, presumably worldwide, for glyphosate. This database comprises hundreds of studies that were performed by or on behalf of the many manufacturers of glyphosate and thousands of references from the open literature. This huge amount of data makes glyphosate nearly unique among the active substances in plant protection product. BfR thinks that the entire database must be taken into account for toxicological evaluation and risk assessment of a substance and not merely a more or less arbitrary selection of studies.” Germany Federal Institute for Risk Assessment’s Response to the IARC, BfR Communication No 007/2015, 23 March 2015

- According to the Australian Pesticides and Veterinary Medicines Authority, “The APVMA currently has no data before it suggesting that glyphosate products registered in Australia and used according to label instructions present any unacceptable risks to human health, the environment and trade…The weight and strength of evidence shows that glyphosate is not genotoxic, carcinogenic or neurotoxic.” Australian Government, Australian Pesticides and Veterinary Medicines Authority (2013)

- The Argentine Interdisciplinary Scientific Council found that “The epidemiological studies reviewed showed no correlation between exposure to glyphosate and cancer incidence, nor adverse effects on reproduction, or Hyperactive-Attention Deficit Disorder in children. It
is estimated that no significant risks would exist for human health regarding adverse effects on the genetic material. Under responsible use conditions for this herbicide, the intake of food and water would not imply risks for human health.” “Evaluación De La Informacion Cientifica Vinculada Al Glifosato En Su Incidencia Sobre La Alud Humana Y El Ambiente,” (“Assessment of scientific information related to glyphosate and its incidence on human health and the environment”) (2009)

- The Canadian Pest Management Regulatory Agency reported that “Health and Welfare Canada has reviewed the glyphosate toxicology database, which is considered to be complete…The submitted studies contain no evidence that glyphosate causes mutations, birth defects or cancer.” Doliner LH. (1991) Pre-Harvest use of glyphosate herbicide [Preharvest application of glyphosate (Roundup) herbicide]. Discussion Document D91-01. 98 pp. Pesticide Information Division, Plant Industry Directorate, Agriculture Canada.

On reviewing all of the available data, both published and unpublished, regulatory authorities have consistently concluded that glyphosate does not cause cancer in either animals or humans.

In short, Mr. Chairman and Mr. Peterson, while I respect the WHO-IARC, its report needs to be put in context. The IARC looks at whether a substance has the potential to cause cancer, rather than the probability it will considering the way it’s used in the real world. Furthermore, the IARC’s recent conclusions appear to be the result of an incomplete data review that has omitted key evidence, and so needs to be treated with a significant degree of caution, particularly in light of the wealth of independent evidence demonstrating the safety of glyphosate.

Thank you, again, for this opportunity, and I remain available to the Committee at any time.

Sincerely,

[Signature]

Dr. Nina Fedoroff