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Item No.:G		AND DEVELOPMENTAL BIOLOGY 10 CHARLES E. YOUNG DRIVE EAST
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December 8, 2014

Honorable City Council of the City of Los Angeles

LINIVEDSITY OF CALIEODNIA LOS ANGELES

Room 395, City Hall

200 North Spring Street

Los Angeles, CA 90012

RE: Draft Ordinance to Prohibit the Growing of Genetically Modified Crops

Honorable Members:

It has just come to my attention that the Los Angeles City Council is considering an ordinance to prohibit (among other things) the growing of "Genetically Modified Organisms" in the City of Los Angeles, including but not limited to genetically modified seeds, plants, and trees. I apologize I could not be there in person to testify, but I understand this item was just added to the Council agenda last Friday and I could not rearrange my schedule to be there with such short notice. However, I am pleased to provide this written testimony for the Council to consider.

Frankly, I and my colleagues at UCLA consider this ordinance to be unnecessary, ill-conceived and antiscience. The **overwhelming** majority of the worldwide scientific community – from the American Medical Association to the World Health Organization – deems biotechnology-derived crops to be safe. Not only are these crops safe, but biotechnology-derived ("GM") crops provide unique solutions that allow food production to be more affordable and sustainable, not only in the U.S., but around the world as well. In addition, I would suggest that city councils are not the best equipped governmental bodies to make these kinds of technical, scientific decisions – particularly outright bans of seeds, plants and trees and certainly without full input from the academic and research community, along with the regulatory agencies, such as FDA and USDA, that have jurisdiction over agricultural biotechnology.

Even though some may argue that this measure is intended to be largely symbolic, there would be **real**, **detrimental impacts** if the City of Los Angeles takes this action. One example is that the draft ordinance would appear to ban the sale, and potentially the possession, of papaya from Hawaii. The majority of commercially grown papayas are "GMO," since USDA developed a unique, biotechnology-derived solution to a plant virus 1996. The development of this "Rainbow Papaya" saved the entire papaya industry in Hawaii from this devastating virus, which could not be controlled by any other method.

Closer to home, the citrus industry is currently faced with an equally daunting "citrus greening" (Huanglongbing) disease that is devastating Florida citrus groves and has now present in California. The entire County of Los Angeles (along with a number of other counties and areas in California) is now subject to quarantine, imposed by the state Department of Food and Agriculture, in an effort to control the disease. Once again, one of the most promising solutions are those that utilize biotechnology – a gene from spinach that can be bred into citrus trees using biotechnology-derived plant breeding techniques. What's the correlation to the Los Angeles City Council ordinance? Citrus trees are found throughout the city in backyard gardens, City parks, and elsewhere. A flat ban on genetically engineered organisms therefore could have immense practical consequences for the City in the very near future.

Lastly, I am very concerned that this draft ordinance would stifle biotechnology research at UCLA, USC, and Caltech. Even though there is an "exemption" for university research, it is narrowly drawn. As currently written, the ordinance may require the cessation of important ongoing research and development efforts at the universities, which I understand are currently holders of USDA permits to use GMOs. I also understand that the draft ordinance defines Genetically Modified Organisms" in an extraordinarily broad manner, and that it is not even limited to plants (which would be bad enough) but applies to all living things other than "human beings and human fetuses." The implications for biotechnology research and development (concerning animals and potential technologies to improve animal health and welfare; microorganisms that may be used to further environmental sustainability; and so on) should be very thoughtfully considered before any sweeping prohibition of this kind is imposed on biotechnology researchers and developmers in the City.

In addition to these potential specific restraints on the universities' and others' research, such an action gives the impression that the City of Los Angeles is hostile to the development of better agricultural products utilizing the best and safest technology. This would severely hamper UCLA's ability to compete for research grants in the fast developing field of agricultural biotechnology. It would also have adverse effects on the City's economy. The San Francisco Bay Area and the San Diego area are well known as centers for the biotechnology industry in the United States; despite its many advantages, I doubt that Los Angeles can compete effectively if measures like this one are enacted.

These points do not exhaust my concerns, but time is short and I am hopeful that there will be opportunity for further discussion before any damaging actions are taken. In spite of the direct negative impacts to Los Angeles, even if this vote were considered to be symbolic, it does not appear to be the kind of symbolism we would want for our community – an anti-science position in a community where we trumpet the value of UCLA, USC and CalTech, in particular. If the ordinance is indeed to be meaningful, I would ask you to get more information before acting. If the vote is merely symbolic, you should have plenty of time to understand the issues and make your view known.

In conclusion, I implore the City Council to take a more measured, thoughtful approach toward this issue, and not hastily rush through what I believe is anti-science and bad public policy. My colleagues at UCLA are happy to come before the Council (given ample notice) and discuss the impacts and implications of this measure.

Best Regards,

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Robert B. Goldberg

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