

January 7, 2011

President's Council of Advisors on Science and Technology (PCAST) Public Oral Comments

Ladies and Gentlemen:

The Biotechnology Industry Organization (BIO) appreciates the opportunity to provide comments today and would like to emphasize the need to increase funding for agricultural research in research agencies and for extramural grants. I am David Edwards, the Director for Animal Biotechnology at BIO. BIO members in the Food & Agriculture Section develop biotechnology-derived plants and animals that improve food, feed, and fuel production; reduce the environmental impact of agriculture; improve models of human diseases; and produce pharmaceuticals for animal and human uses.

Because these applications are firmly rooted in discoveries and new techniques provided by scientific research that occurs in government and academic labs and is usually funded by governmental grants, **BIO** strongly supports continuation of government support of basic research as a foundation for future scientific discoveries. Through biotechnology, animals can be raised that produce high titers of readily extractible human antibodies and other proteins to treat human diseases and protect our troops, as well as for replacement tissues for regenerative medicine. High level research can be performed on livestock that have been engineered to accurately develop diseases that afflict humans, towards improved disease-specific therapies. Biotechnology can also provide us with more sustainable methods for feeding our growing populations long into the future.

BIO supports research funding for technologies that will provide fuel for the future, improve agricultural production efficiency and allow us to raise crops in harsher climates. Agricultural and forestry biotechnology contributes to rural economies and keep jobs in the areas that need them. BIO supports increased funding for the research programs at the Department of Agriculture including all programs within the National Institute of Food and Agriculture (NIFA): the Agriculture and Food Research Initiative, the Agricultural Research Service, the Economic Research Service, and the Forest Service. Results from these important research programs can be leveraged across the research arms of the government to solve critical problems that require science-based, cross-cutting and multi-disciplinary solutions.

In summary BIO supports strong research programs in agriculture and beyond that emphasize the need for research on new, science-based agricultural technologies including plant and animal biotechnology, which provide the means to meet the vast challenges of human health, hunger and energy supply in a sustainable environment. BIO looks forward to working with you on this crucial issue.

Sincerely,

David Edwards, Ph.D.

Director, Animal Biotechnology

David Edwards

Food and Agriculture