

## **BARC Facilities Upgrades**

Request: \$3,000,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The Beltsville Agricultural Research Center is our nation's flagship agricultural research facility. Many of the facilities currently utilized at BARC were constructed prior to World War II, and BARC continues to have significant modernization needs which this funding seeks to address. This is a good use of taxpayer dollars because it will enable Federal researchers performing groundbreaking research in areas focusing on agriculture and nutrition to undertake their critical work in modern and efficient laboratory and office space.

## **Biomedical Materials in Plants**

Request: \$1,700,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

This request would restore funding to continue important research into biomedical materials in plants. This research will be conducted to enhance bioactive materials present in plants so that they may be used to improve animal and human health. This is a good use of taxpayer funds because it will be utilized to discover potentially new and more efficient means to deliver pharmaceuticals.

## **Bioremediation Research**

Request: \$111,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

Munitions storage sites and bombing ranges in parts of the U.S. have left huge tracts of soils and lands contaminated by highly toxic residues from such explosives as TNT. Those soils and lands now are limited environmentally for commercial or agricultural purposes. These funds support ongoing research to determine if forage plants can remove TNT and its metabolites from contaminated sites. The work has recently been expanded to include bioremediation of soils for toxic metals and is being used in the Chesapeake watershed to

control runoff. The project is a valuable use of taxpayer dollars because it seeks to improve the environment and provide for the commercial or agricultural reuse of environmentally tainted lands.

**Potato Disease**

Request: \$61,000

Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

This request will restore funding used to support research aimed at improving the disease resistance of potatoes through plant breeding and marker assisted selection. This is a good use of taxpayer funds because it will enable a comprehensive understanding of the genome of potatoes to enable improved quality, disease resistance, susceptibility to pests, and drought tolerance, thereby improving the safety of our food supply and bolstering an important sector of our domestic agricultural economy.

**Poultry Diseases**

Request: \$408,000

Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

This request will restore funds used to study susceptibility of poultry to avian coccidiosis and pneumovirus which have a multi-billion dollar impact on the industry every year. This research focuses on understanding the genetics of both the parasite and the host chicken to identify targets that will allow better disease prevention and control. This is an important use of taxpayer funds because it seeks to improve the health, safety and availability of our food supply and bolster an important sector of our agricultural economy.

**Medicinal and Bioactive Crops**

Request: \$111,000

Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The U.S. National Arboretum, a unit of BARC, has well-established and respected programs in

plant germplasm and improvement and genetic engineering. This funding will be utilized to carry out research essential to identifying plant components that have human health benefits and also developing value-added varieties of plants. This is a good use of taxpayer funds because it seeks improve human health, while also bolstering an important sector of our agricultural economy.

**Animal Breeding and Protection**

President's Budget Request: \$1,500,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The President's budget request includes funds to exploit the recently released complete genomic sequencing of cattle, poultry and swine. This genomic data will be used by BARC scientists to identify genetic markers for breeding desirable traits of agricultural animals, including disease resistance, feed efficiency and product quality. This is a good use of taxpayer funds because it seeks to improve the safety of our food supply while bolstering an important sector of our domestic agricultural economy.

**Colony Collapse Disorder of Bees**

President's Budget Request: \$500,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The President's budget request seeks to address Colony Collapse Disorder - a major agricultural concern as certain crops can only be pollinated by honey bees. The research to be conducted will focus on the role of pathogens and other stress factors such as pesticides and mitigating their effects. This is a good use of taxpayer funds because it seeks to control or eliminate colony collapse disorder which has the potential to significantly impact our domestic food supply and damage our agricultural economy.

**Crop Breeding and Protection**

President's Budget Request: \$1,250,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The President's budget request would fund research targeted at expanding tools needed for classical plant breeding. In addition, it will be aimed at enhancing plant breeding for sustainable production, climate change protection, disease and insect resistance, and rapid response to emergencies related to plant health. This is a good use of taxpayer dollars because it will improve the ability of producers to reliably cultivate and grow crops.

**Food Safety**

President's Budget Request: \$1,500,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The President's budget request includes funds to develop integrated, science-based production practices to prevent pre-harvest contamination of produce by pathogens such as E. coli O157:H7. This is a good use of taxpayer dollars because it seeks to ensure a safe food supply - critical not only to the health of all Americans, but also the domestic agriculture industry.

**Global Climate Change**

President's Budget Request: \$800,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The President's budget request recognizes BARC's unique research facilities which enable scientists to have total control over environmental conditions including light, ozone, green house gas levels, temperature, etc. These facilities as well as the established scientific expertise in this area will be used to increase the resilience of crop production systems to the stress of climate change and weather extremes resulting in healthier, higher yielding crops. This is a valuable use of taxpayer dollars because it will enable farmers to adapt production techniques in the face of global warming, thereby ensuring continued production of our domestic food supply and a sustained agricultural economy.

**Human Nutrition**

President's Budget Request: \$5,400,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The Beltsville Human Nutrition Research Center conducts the "What We Eat in America" dietary survey that is the nation's nutrition monitoring effort. This critically important survey provides yearly information about food consumption and health of the American population. The President's budget request will expand this effort to enable us to more fully understand the nature of the obesity problem so it may be successfully addressed. This is a valuable use of taxpayer dollars because the obesity epidemic, if left unchecked, will continue to reduce life spans, increase the cost of health care, and lower productivity.

**Local Food Systems**

President's Budget Request: \$500,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The President's budget request will enable Beltsville scientists to establish new research activities related to urban agriculture. Research will be conducted to develop vacant land in cities in the Northeast for green house production of fruits and vegetables. This is a valuable use of taxpayer dollars because it will increase the actual capacity to produce food locally in urban communities.

**Reduce World Hunger**

President's Budget Request: \$300,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

The President's budget request will enable BARC scientists to collect phenotypic data and genome sequence derived markers to characterize germplasm for traits of importance in food animals. This is a valuable use of taxpayer dollars because it will enable improved breeding in dairy cows and poultry, increasing productivity and the ability to feed more people.

**Plant, Animal and Microbial Collections**

President's Budget Request: \$1,250,000  
Beltsville Agricultural Research Center  
10300 Baltimore Blvd, Beltsville, MD 20705

Beltsville plays a central role in protecting, storing, and cataloging germplasm of both animals and plants. The National Germplasm Resource Information Network is headquartered at BARC and BARC's Systematic Entomology Lab is the only ARS site that does insect identifications for insect pests of plants. The President's budget request would enhance the capacity to conserve a broad diversity of National Plant Germplasm System Collections, as well as insect systematic capacity. This is a valuable use of taxpayer dollars because it will maintain and expand critical collections and expertise that are of importance to agriculture and the economy.