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Dedicated to Promoting the Research and Education Mission of the Henry A. Wallace
Beltsville Agricultural Research Center, Beltsville, Maryland

**Testimony for the
Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies
Committee on Appropriations
U. S. House of Representatives**

**Submitted by Vernon G. Pursel, President, Friends of Agricultural Research – Beltsville
on April 21, 2009**

Madam Chair, and Members of the Subcommittee, thank you for this opportunity to present our statement regarding funding for the Department of Agriculture's Agricultural Research Service (ARS), and especially for the Agency's flagship research facility, the Henry A. Wallace **Beltsville Agricultural Research Center (BARC), in Maryland.** Our organization - **Friends of Agricultural Research - Beltsville**—promotes the Center's current and long-term agricultural research, outreach, and educational missions.

Before going to the heart of our testimony, please allow us to note for the record that during FY-2010 the Beltsville Agricultural Research Center will mark a great historical milestone, a milestone to celebrate the many great and small accomplishments that BARC research has contributed to the nation's agricultural bounty and to the overall march of scientific progress. **A full century will have passed since 1910, the year research in Beltsville began with the assembly of a dairy cattle herd for research purposes. The ensuing BARC story is by all rights a national story - a story of world-class accomplishment.** BARC Director Joseph Spence and his staff are planning a series of worthy events to commemorate the centennial year.

The Friends of Agricultural Research-Beltsville (FAR-B) is honored to be both a participant in the centennial planning process and a contributor to coming events. We would be pleased, Madam Chair, **to answer any questions, to collect any information or citations the Subcommittee might wish regarding the centennial or our testimony.**

We now turn to the specifics of our testimony for FY-2010:

Under-Funded Salary Growth. \$1,700,000.

First, we appreciate the restoration of items that were recommended for termination in the president's proposed budget for FY-09. We would hope that the FY-10 budget does not identify additional program terminations at BARC, and we would hope that there will be much needed funding increases. In the FY-09 budget, there was only about half of the needed funding for

salary increases that went into effect at the beginning of the year. An unfortunate result of recent annual increases in Federal salaries - without offsetting funding increases— is a negative growth in funding available for discretionary spending on research. This situation has continued for several years now, and it has had a significant negative impact on ARS research.

FAR-B strongly recommends funding adjustments to offset the almost yearly decline of net research funding resulting from under-funded salary increases.

Research Initiatives.

While it is unclear at this time if the FY-10 budget includes funding for additional research at BARC, it is important to point out that BARC conducts many areas of research and that the research is of the highest national priority. BARC research presents many compelling opportunities to reward agriculture, the environment, and the consumer.

Food Safety – \$500,000.

The Beltsville Area recently established the largest single food safety unit in ARS. This research unit will focus on a number of issues, including safety of fruits and vegetables and food safety issues related to organic agriculture. The ability exists at BARC to raise crops and animals under farm conditions, and then to process, store, and package the resulting products. A unique feature of the food safety research program at BARC is the ability to propose and test interventions that greatly reduce pathogen exposure in foods, and ultimately in people.

Genomic Prediction – \$1,500,000.

The promise of understanding the genome of plants and animals is being fully exploited at Beltsville. In groundbreaking research conducted here, scientists have been able to quickly and accurately identify dairy bulls that will produce daughters capable of producing the most milk. Now a simple test at birth can predict at twice the accuracy and at a cost of about \$250 the potential of a bull to sire high producing cows. Traditionally, bull prediction methods have required farmers to obtain production records of 50 to 100 daughters per bull to determine his genetic merit, at a cost up to \$50,000 per bull. The potential for developing and expanding this breakout technology is huge and at great savings to dairy farmers and consumers alike.

Climate Change – \$1,500,000.

BARC has truly unique growth chambers that can measure and observe plant growth at every stage from root to stem, and under every conceivable atmospheric condition. BARC is using these chambers to measure the effects of increasing atmospheric CO₂ and changes in environmental temperatures. Studies are underway not only on agronomically important crops, but also on invasive weeds. Research shows that environmental changes may enhance the rapid growth of invasive plants, thus threatening to exacerbate already costly problems for American agriculture.

Obesity Prevention – \$500,000.

Obesity negatively impacts the health and productivity of the American public. Moreover, obesity comes with greatly increased risk of chronic diseases that dramatically add to the

economic costs of health care. The Beltsville Human Nutrition Research Center (BHNRC) is researching barriers and facilitators to help the American public follow Federal dietary guidelines. A major research emphasis is to prevent obesity through a better understanding of why people make the food choices they do. This research also will help USDA design and implement more effective food assistance programs.

Waste Utilization – \$1,000,000.

Because it is a working farm and has research scientists who have expertise in animal science, conversion technologies, and environmental science, BARC is an ideal place to study the utilization of farm-generated waste products. Farm-generated waste products can be environmentally harmful, have little or no value to the farmer, and disposal can be costly. Work at Beltsville has led to the effective development of technologies and products that take waste by-products and convert them to valuable new products. Examples include biofuels and plastics made without petroleum.

Trade Enhancement and Global Competitiveness – \$2,000,000.

BARC maintains and expands the Federal government’s unique collections of materials and organisms that are of utmost importance in identifying pests and for ensuring that unwanted pests are prevented from entering the U.S. and producing destruction of animals and plants of economic importance. These unique and irreplaceable collections include the Germplasm Resource Information Network, and invaluable reference collections of insects, nematodes, parasites, and fungi. These world-class collections attract leading experts from around the world who study and use them for their own purposes. The collections are absolutely critical to identifying and preventing exotic pest problems from entering the United States through imports or by international travelers as well as demonstrating that our exports are safe. The continued availability of research in this general area of systematics is essential for trade, for homeland security, and for the protection of American agriculture.

Chesapeake Bay Improvement – \$500,000.

BARC scientists are working with farmers on Maryland’s Eastern Shore to learn how to improve on-farm conservation practices that will improve water quality in the Chesapeake Bay. The research goals—targeting the entire range of Eastern Shore farming practices—include reducing fertilizer and pesticide usage. A central goal is to create agronomic and animal waste management practices that will reduce fertilizer usage and control pollution runoff. Biocontrol studies are searching out ways to minimize the need for pesticides. Scientists also are using advanced remote sensing and hydrological technologies to protect the health of the Chesapeake watershed.

FAR-B strongly recommends continued funding for these high-value, critically needed research initiatives.

Facilities. \$30 Million.

Ongoing facility needs at BARC are a reflection of the age of many of the buildings and infrastructure at BARC. As the program and the number of employees has decreased over time

due to lack of funding, the burden of maintaining a large research facility has taken its toll in terms of routine and ongoing maintenance. It is essential that additional funding be provided for general facility maintenance and that plans for facility consolidation move forward.

With talk of greatly increased expenditures of the Federal government for facilities projects that are “shovel-ready”, it is our hope that the Beltsville Area will be the recipient of a significant amount of those funds. Several projects at BARC are fully designed and ready for construction to begin almost immediately. These include the final phase of construction of the Beltsville Human Nutrition Research Center (BHNRC), in which existing building 307 will be gutted and rebuilt. This will allow BARC to relocate the entire BHNRC- now spread out at three separate locations - to one location and also free up space for other needed research activities. The completion of this important building renovation is urgently needed at BARC because many of the proposed space consolidations, which will greatly reduce the operating costs at the Center, are dependent on this project.

Other projects that are fully designed and ready to go include three projects at the U.S. National Arboretum (USNA). The relocation of the USNA entrances from R Street and New York Avenue to Bladensburg Road is a major project that needs to move forward and will greatly improve public access while relieving traffic congestion on New York Avenue. Finally, the trash abatement project for the cleanup of Hickey Run needs to move forward. Rain runoff produces a great volume of trash as the result of inadequate storm water control by the District of Columbia. This trash accumulates on the property of the USNA. This project is urgently needed to prevent trash from washing onto the arboretum grounds, which now occurs with almost any significant rainfall. This project is also critically importance environmentally and for helping clean up the Anacostia River. The project has been completely designed and, while funds have been appropriated to the DC government and to ARS for this project, funding is not adequate to start construction on this project.

FAR-B strongly recommends funding to complete these long delayed, urgently needed facility improvements.

Madam Chair, that concludes our statement. We again thank you for the opportunity to present our testimony and for your interest and support.

Sincerely,



Vernon G. Pursel, Ph.D.
President