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NATIONAL



C-FAR

THE NATIONAL COALITION FOR  
FOOD & AGRICULTURAL RESEARCH

**Program:**

Safeguarding the Seeds of Food Security

*“The U.S. National Plant Germplasm System”*

June 25, 2012

# PROGRAM

## *Welcome and Introduction*

LESLIE CAHILL  
NATIONAL C-FAR REPRESENTATIVE

## *Distinguished Speaker*

DR. PETER BRETTING  
NATIONAL PROGRAM LEADER  
PLANT GERmplasm AND GENOMICS  
USDA, AGRICULTURAL RESEARCH SERVICE  
BELTSVILLE, MARYLAND

## *Open Forum*

## *Closing*

LESLIE CAHILL

NATIONAL C-FAR IS a nonprofit, nonpartisan, consensus-based and customer-led coalition that brings food, agriculture, nutrition, conservation and natural resource stakeholders together with the food and agriculture research and extension community, serving as a forum and a unified voice in support of sustaining and increasing public investment at the national level in food and agricultural research, extension, and education. For additional information, go to [www.ncfar.org](http://www.ncfar.org); or contact Tom Van Arsdall, Executive Director, at [tom@vanarsdall.com](mailto:tom@vanarsdall.com).

## **ABSTRACT**

The world's crops constitute the thin green line that stands between humanity and starvation. Their intrinsic genetic diversity enables crops to maintain productivity through time, and to adapt to the challenges of emerging and evolving diseases and pests, environmental deterioration, expanding human populations, scarce and expensive inputs, and rapidly changing agricultural conditions. But irreplaceable crop diversity is threatened by extinction in nature, in traditional farmers' fields, and even in developed nations. The diversity must be collected and safeguarded in genebanks in the form of seeds, bulbs, tubers, etc., which are collectively termed "plant germplasm" or "plant genetic resources" (PGR). Genebanks support global food security by ensuring access to these plant genetic resources in the face of those daunting challenges. Researchers and plant breeders turn to genebanks for sources of resistance to diseases and pests, tolerance to environmental extremes, materials for key experiments, or for new valuable products. The USDA's National Plant Germplasm System (NPGS) of 20 genebanks, some now more than 100 years old, comprises one of the largest and most diverse genebank systems in the world, safeguarding more than ½ million living samples from more than 14,000 different plant species. The U. S.'s vibrant crop genebanks are more relevant today than ever before, playing key roles in national and global agricultural progress. Scientific interest in these genetic materials has increased tangibly during the last five years, with the NPGS distributing more than 1 million plant samples to researchers and breeders world-wide. These materials are keys for continued progress in crop genetics and breeding which underpins current and future food security.

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## **SPEAKER BIOGRAPHY**

**Peter Bretting, Ph. D.**, has served as USDA/ARS National Program Leader, Plant Germplasm and Genomes since 1998, and was promoted to Senior National Program Leader in 2004. This position involves co-leadership, coordination, and direction of a national program of crop genetic research conducted at more than 50 locations nationally, with an annual budget of approximately \$180 million. He also has served as a USDA representative for the US government delegations to the negotiations of the UN-FAO International Treaty for Plant Genetic Resources for Food and Agriculture, and the UN-UNEP Convention on Biological Diversity's International Regime on Access and Benefit-Sharing. He was awarded the Presidential Rank of Meritorious Senior Professional by President Barack Obama in 2010.

## **SEMINAR SERIES DESCRIPTION**

National C-FAR's Seminar Series regularly presents leading-edge researchers to address pressing issues confronting the public and Congress. National C-FAR and the Seminar Series serve as a resource to policymakers and all congressional staff.

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