NATIONAL COALITION FOR FOOD AND AGRICULTURAL RESEARCH

Media Release-*Click Here to Register for Seminar*

PLANT BREEDING AND GENETICS

The Need for Agricultural Innovation to Sustainably Feed the World by 2050

Washington, DC–March 17, 2017, for Immediate Release – Research on improvements that can be made in plant breeding through technological innovation will be the subject of NCFAR's National Agricultural Week seminar on Wednesday, March 22, at 10 AM in 328A Russell Senate Office Building, and again at noon in 1310 Longworth House Office Building. The presenters are Dr. Stephen Baenziger, a professor in the Department of Agronomy and Horticulture at the University of Nebraska-Lincoln and Dr. Rita Mumm, a professor emerita in the Department of Crop Sciences at the University of Illinois at Urbana-Champaign.

"The paper focuses on the role and critical importance of innovation in plant breeding to meet the grand challenge of being able to provide food and nutritional security to humankind," say Drs. Baenziger and Mumm. "Innovation is critically important to continued progress in providing food and nutritional security to humankind in the decades ahead."

"This presentation provides an excellent example of the value of federally funded food and agricultural research, extension, and education in producing the scientific outcomes and outreach needed to meet 21st century challenges and opportunities," says Andy LaVigne, President of the National Coalition for Food and Agricultural Research (National C-FAR).

Highlights: The ultimate goal of plant breeding is to develop improved crops. Improvements can be made in crop productivity (e.g., grain yield; adaptation to a specific region; disease and pest resistance; tolerance to drought, heat, cold, or salinity), crop processing and marketing (e.g., milling or baking/ cooking/fermentation quality, biofuel yield, visual appeal, postharvest storability, shelf life), and/or consumer quality (e.g., flavor, protein content, oil profile, fiber quality, nutritional value). Given the goals and steps in the plant breeding process, innovation provides the means to achieve greater gains, increase efficiency, and accelerate time-to-market for improved cultivars. The innovation can come in the form of new genetic technologies that may involve creation or assembly of genetic diversity, production of the progeny to be evaluated, structures and schemes to facilitate selection of superior *genotypes*, and even systems to enable delivery of superior performance to farmers. Several significant examples of innovative technologies are presented to demonstrate what has been done to date. Given the focus and investment devoted to technological innovation in crop improvement, it is vital that maximal value is derived; this often means fitting improved cultivars and the process to create them with other features of the agricultural production system and the value chain. Integration with farmer-implemented agronomic practices; delivery options for crop protection; and machinery used for planting, harvest, and postharvest storage are important to realizing the full genetic potential of improved cultivars and deriving maximal value and impact from innovation. Likewise, further innovation in production systems and value chains will sustain and leverage genetic advancements. This Council for Agricultural Science and Technology (CAST) Issue Paper 57 will be available March 22 as a free download from the CAST website, cast-science.org/publications.

The seminar is open to the public and the media.

****

The **National Coalition for Food and Agricultural Research (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. National C-FAR's Hill Seminar Series, now in its tenth year, regularly presents leading-edge researchers working to provide answers to pressing issues confronting the public and Congress. The Hill Seminar Series helps demonstrate the value of public investment in food and agricultural research—investment that returns 67 percent per year on average, and $20 in economic benefit from every $1 investment in food and ag research.

Go to http://www.ncfar.org/Hill_Seminar_Series.asp for more information about the seminar series and past topics. Interviews with National C-FAR President Andy LaVigne are available by request. For additional information, go to www.ncfar.org; or contact Tom Van Arsdall, Executive Director, at tom@vanarsdall.com or (703) 509-4746.