Lunch-N-Learn Seminar

The National Coalition for Food & Agricultural Research

Program:

Mapping for the Future of Our Food

“Harvesting Opportunities from Lessons Learned in the Maize (Corn) Genome Project”

July 25, 2011
PROGRAM

Welcome and Introduction

SARAH GALLO
NATIONAL C-FAR REPRESENTATIVE

Distinguished Speaker

DR. PATRICK S. SCHNABLE
BAKER PROFESSOR OF AGRONOMY &
FOUNDING DIRECTOR, CENTER FOR PLANT GENOMICS
IOWA STATE UNIVERSITY
AMES, IOWA

Open Forum

Closing

SARAH GALLO

NATIONAL C-FAR IS a nonprofit, nonpartisan, consensus-based and customer-led coalition that brings food, agriculture, nutrition, conserv- 
vation 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; or contact Tom Van Arsdall, Executive Director, at tom@vanarsdall.com.
ABSTRACT
Following its domestication about 10,000 years ago, plant breeders have exploited the extensive genetic diversity of maize (corn) to adapt this species to meet human needs. Over the past 75 years breeders have been tremendously successful at increasing grain yields. But increasing world demand for corn grain for food, feed, fiber and fuel provides new challenges, particularly because future yield increases must take place in a world where critical agricultural inputs will be more expensive (e.g., nitrogen fertilizer) and limited (e.g., water). Over the past 15 years, the Federal government has made substantial research and development investments in plant genomics, including the $30 million maize genome sequencing project. This presentation focuses on how future research and development can be build on the lessons learned from the maize sequencing project to ensure high levels of sustainable agricultural production even in the face of increasing climate variability.

SPEAKER BIOGRAPHY
PATRICK S. SCHNABLE, Ph.D., is a Baker Professor of Agronomy at Iowa State University and serves as founding director of ISU’s Center for Plant Genomics. His scientific investigations have been wide-ranging, encompassing the behavior of transposons, patterns of recombination, the molecular processes responsible for heterosis, and building tools and developing resources for genomic investigations. Schnable has authored ~100 peer-reviewed papers. Recently he was the co-lead author on the maize genome sequencing paper (published in Science) and a co-corresponding author on a Nature Genetics paper that reported the re-sequencing of six additional maize haplotypes. Schnable serves as an associate editor for the scientific journal PLoS Genetics (Impact Factor 8.7). In 2009 he was appointed a Chang Jiang Scholar Professor at China Agriculture University in Beijing, and in 2010 he was elected a fellow in the American Association for the Advancement of Science. He is also the managing partner for Data2Bio, LLC, which helps biologists design, conduct and analyze DNA sequencing projects. He received his BS from Cornell University and his PhD from Iowa State University and conducted post-doctoral research at the Max Planck Institute in Köln, Germany.
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.

Seminar Series Contributing Sponsors

American Seed Trade Association
American Society for Nutrition
    Bayer CropScience
    CHS Foundation
Council for Agricultural Science and Technology (CAST)
Council on Food, Agricultural & Resource Economics (C-FARE)
    Dr. William Danforth
    Elanco Animal Health
    Illinois Soybean Association
    Indiana Soybean Alliance
    Institute of Food Technologists
    National Farmers Union
    Riley Memorial Foundation
    Syngenta
    United Soybean Board
    University of Wyoming
    Weed Science Society of America

THE NATIONAL COALITION FOR FOOD & AGRICULTURAL RESEARCH
http://www.ncfar.org

R. Thomas Van Arsdall, Executive Director
Phone: (703) 509-4746
E-mail: tom@vanarsdall.com