## Dr. Arden L. Bement, Jr. Introduction of President France A. Córdova and Opening Remarks GPRI Grand Challenge Conference Wednesday, April 18, 2012

Thank you for joining us today for Purdue University's Global Policy Research Institute's Second Annual Policy Research for a Changing World "Grand Challenge" Conference. I am Arden Bement, Director of the Global Policy Research Institute.

It is my pleasure to introduce the President of our great University.

She has distinguished herself as a world-renowned scientist, educator and administrator.

She has been a writer, a distinguished professor, and a prominent researcher in astrophysics. She holds a bachelor's degree in English from Stanford University, a PhD in Physics from the California Institute of Technology, and honorary degrees from top international universities.

She was the first woman to hold the position of NASA chief scientist and was once named, by *Science Digest*, one of the 100 brightest scientists in America under the age of 40.

Dr. Córdova is a United States Senate-confirmed member of the National Science Board. She was unanimously confirmed by the United States Congress as a citizen member of the Smithsonian Institution Board of Regents, and was recently elected chairperson for a three-year term.

In her time at Purdue, she has led the university to record levels of research funding, reputational rankings, and student retention rates; championed diversity among students, staff and university leadership; and promoted student success, faculty excellence, and programmatic innovation. Dr. Córdova has worked diligently to broaden Purdue's role as a top research institution on the global stage.

Ladies and gentlemen, please help me welcome Dr. France Córdova.

<< President Córdova's Welcome>>

Thank you President Córdova.

At this time I would like to give you a preview of the excellent presentations you will be hearing at this conference. Those of you who attended last year's conference might recall that the emphasis of the presentations was on sustainability, disruptive events and security. Today's presentations will focus on health, environment, food security, and society and leadership.

Our first presenter will be Professor Sonak Pastakia, Assistant Professor of Pharmacy Practice, who will be "Skyping in" from Western Kenya. He will describe his project BIGPIC, in which he is using a combination of group motivations and incentives to not only encourage diabetes patients to improve their own health through self drug management but also the health of other members of their community through peer drug maintenance. The results he has achieved in reducing blood sugar levels in one year is remarkable, as you will learn.

The second presenter is Professor Sophie Lelièvre, Associate Professor of Basic Medical Sciences, who is conducting an international breast cancer and nutrition project to develop a comprehensive understanding of the influence of life environment and ancestry on dietary habits and the development of specific forms of breast cancer. This is an enigmatic problem that involves deciphering the risk mechanisms of a disease for which no external causative agent has yet been identified. Dr. Ellen Gruenbaum, Head and Professor of Anthropology, will join Dr. Lelièvre for the presentation.

We will then hear from Betty Bugusu, Managing Director of Purdue's International Food Technology Center. She will describe a project that is exploring means of enhancing incomes of smallholder farmers in East Africa by linking their food crops to specific markets through the development of economically viable food technologies.

Thomas Hertel, Distinguished Professor of Agricultural Economics by teleconference and Nelson Villoria, Research Assistant Professor in Agricultural Economics, will next describe a two-year pilot project to establish and maintain a freely available, spatially-explicit database to track the impacts of environmental changes on agricultural resources on a global basis. The database will be accompanied with analytical tools and training programs for scientists, decision makers, and development practitioners.

Next, Satish Ukkusuri, Associate Professor of Civil Engineering, will describe his work in developing an integrated framework for strengthening the resilience of networks in disasters. He is bringing together ideas, theories, and methods from the disciplines of social science, engineering, and public policy to develop a global perspective in pursuing this grand challenge.

Finally, Laurel Weldon, Professor of Political Science and Leigh Raymond, Associate Professor of Political Science, will provide an overview on an international workshop held Monday and Tuesday of this week here at Purdue University entitled "New Perspectives on Intractable Problems: Informal Institutions as Policy Responses to Global Grand

Challenges". The workshop focused on how more attention to informal institutions; such as, social and ethical norms or other "unwritten" rules of behavior, might improve policy responses to global grand challenges.

These presentations will be followed by a question and answer session.

I am proud to announce that the Purdue Climate Change Research Center is a joint sponsor with the Global Policy Research Institute in providing incentive grants to coalesce interdisciplinary faculty teams to address some of these "Global Grand Challenge Questions". GPRI appreciates this joint partnership.