## Introduction

- Fred A. Cholick, President/CEO, KSU Foundation
- PhD in Plant Breeding/Genetics
- 5 years international development USAID
- 10 years research/teaching University
- 20 years administration universities Dept Head –
  Dean
- Retiring March 31, 2015

## LGU\* Mission

- Develop next generation of professionals and practitioners – Teaching/Learning
- Develop new knowledge and productsresearch & scholarly activities
- Disseminate knowledge and products to the "people" – Extension/Service

\* Land Grant University

# Bayh-Dole Act - 1980

 Permits universities to elect to pursue ownership of an invention in preference to the government – expectation of returns to be invested in R&D

# The Landscape for R&D

- LGU mission in 2015 and beyond
- Mission same, means different

"Why?"

### Innovation & Inventions

- Shift from predominate "public" sector to and "private" sectors.
- Higher Education is a public good investment in public good has bee reduced or not keep pace with private investment.

## **R&D Support by Funding Sources (%)**

Years	Industry	Gov't
1953	44	56
1973	46	53
1993	60	37
2003	70	28
2008	69	28

Source: <a href="https://www.nsf.gov/statistics/nsb1003/">www.nsf.gov/statistics/nsb1003/</a>

# Total R&D Funding – 2013

Industry \$330B

Academia \$ 63B

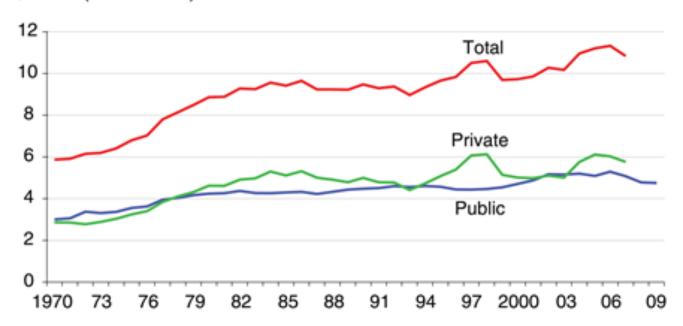
Government \$ 53B

Non-Profit \$ 19B

Source: Baltelle R&D Magazine 2013

#### Real food and agricultural research and development funding, 1970-2009

\$ billion (2006 dollars)



Note: Data for 2008-09 are preliminary.

Source: USDA, ERS based on data from National Science Foundation, USDA's Current Research Information System (CRIS), and various private sector data sources. Data are adjusted for inflation using an index for agricultural research spending developed by ERS.

# Public & Private Sector Expenditures in Plant Breeding/Genetics – USA

Year	Public	Private
1975	\$102M	\$407M
1985	\$210M	\$502M
1995	\$ 45M	\$583M

## **Change Role of Higher Ed Foundation**

- "Raise money invest and make money"
- Advocacy through philanthropy/unit donor with university need
- Advance university facilitate partnership due to existing relationship

## **Public Private Partnerships (PPPs)**

 Public private partnerships (PPPs) have emerged as a major approach for delivering knowledge/products

### **Benefits of PPPs**

- Shared knowledge
- Cost efficient
- Mean for product to market
- Local economic growth
- Support developing the next generation of professionals

# Personal Prospective – Experience (public, private, partnerships – PPPs)

- Completed agreement on release of soybean variety with private gene (1091 RR) (2000)
- Agreement to insert private gene in spring wheat program discontinued (2002)
- Holistic PPPs and individual PPPs
- Landscape/role have to continue to change

## **Take Home Message**

- Seek opportunities to develop partnerships with the private sector
- Set expectations upfront
- Get to "know" each other
- PPP are Your-Our Future