

2018 Workshop on Innovation and Regulation in Agriculture

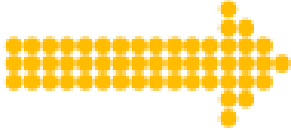
Co-organized by NC State Center of Excellence for
Regulatory Science in Agriculture (CERSA) and Bayer

Dr. Danesha Seth Carley, Director CERSA

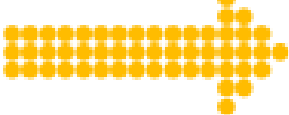


NC STATE THINK AND DO
THE EXTRAORDINARY

**GLOBAL
POPULATION
GROWTH⁴**

7B
2016  **9B**
2050

**AGRICULTURAL
PRODUCTION
NEEDS TO
INCREASE⁴**

70%  **2050**

**TODAY'S CROP
PRODUCTION
ALLOCATION⁵**


62%
HUMAN
FOOD


35%
ANIMAL
FEED


3%
BIOENERGY CROPS,
SEED & OTHER
INDUSTRIAL PRODUCTS

⁴ FAO Expert Meeting on How to Feed the World in 2050; 2009

⁵ Institute on the Environment, University of Minnesota



NC STATE THINK AND DO
THE EXTRAORDINARY

North Carolina Plant Sciences Initiative

NC Plant Sciences: Mission

The Mission of the Plant Sciences Initiative is to **accelerate** the discovery, education, innovation and outreach. We will accomplish this by forming **interdisciplinary teams** and collaborate with **our stakeholders** to bring solutions and new knowledge for plant systems needed to promote the well-being of mankind.



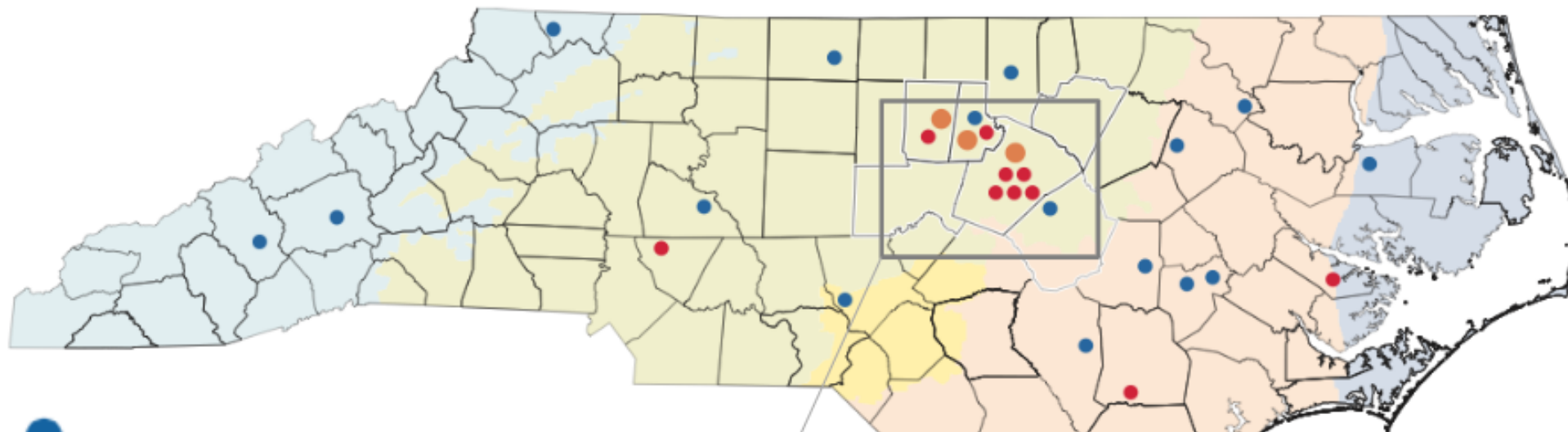
Our Aspiration....

**To become the leading research and educational
plant science program in the WORLD**



**\$160.2M Investment
44+ Commodity Groups
Opening Fall 2021**

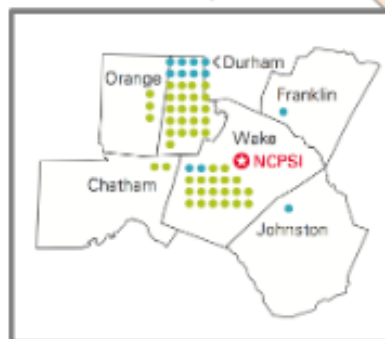
Why Here?



- 18 NC State/NCDA&CS Research Stations
- 10 NC State Field Labs

Located in Research Triangle Area >

- 3 Tier 1 Research Universities
- 11 Large Agbiotech Firms
- 54 Small to Midsize Agbiotech Firms



96 New Faculty in 3 year period at NC State

5 Geographic Regions: Mountains Piedmont Sandhills Coastal Plain Tidewater

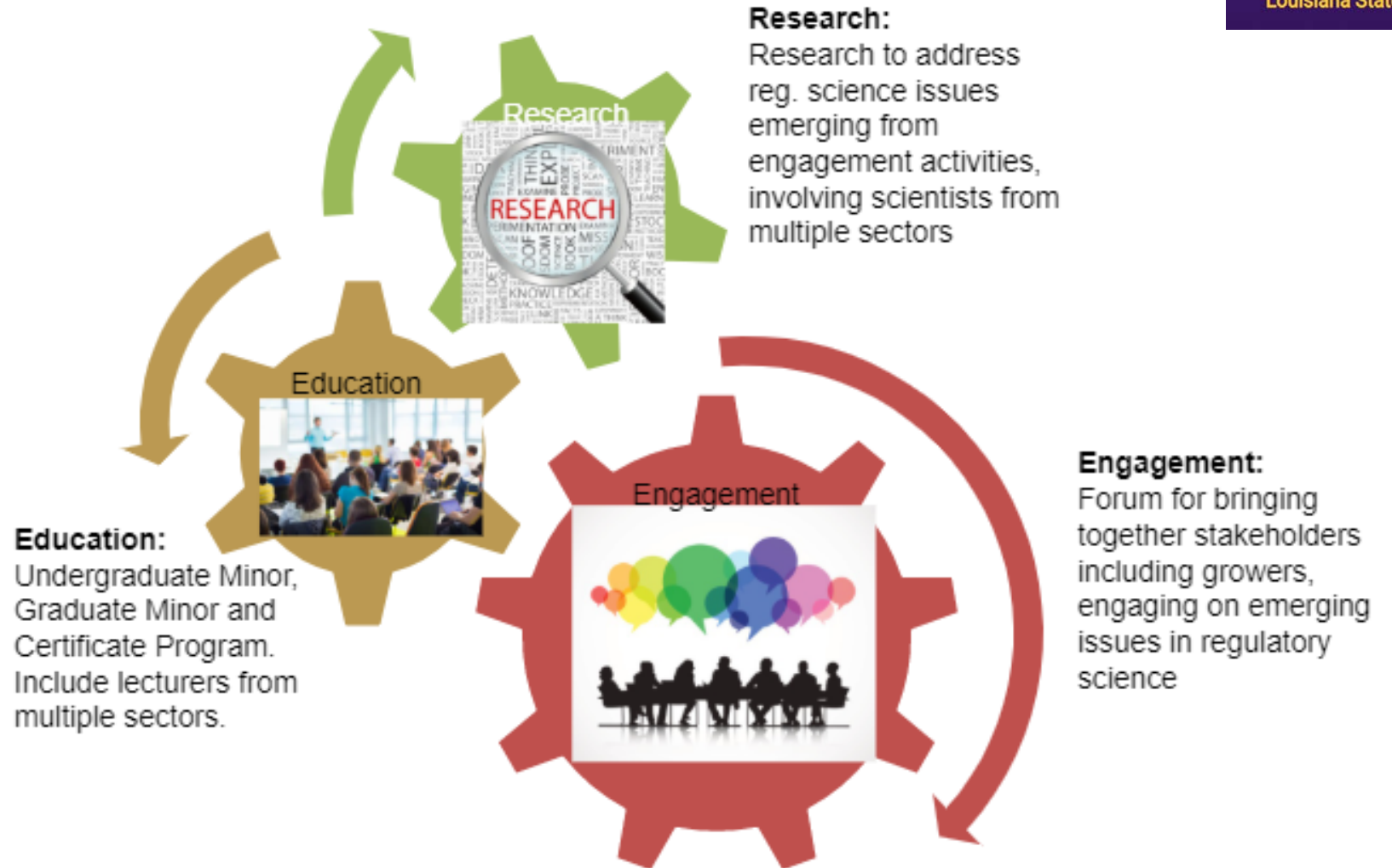
Nation's third most diverse agricultural economy - \$87B Annually
90+ Crops & Animal Agriculture

NC State and LSU: Center of Excellence for Regulatory Science in Agriculture (CERSA)



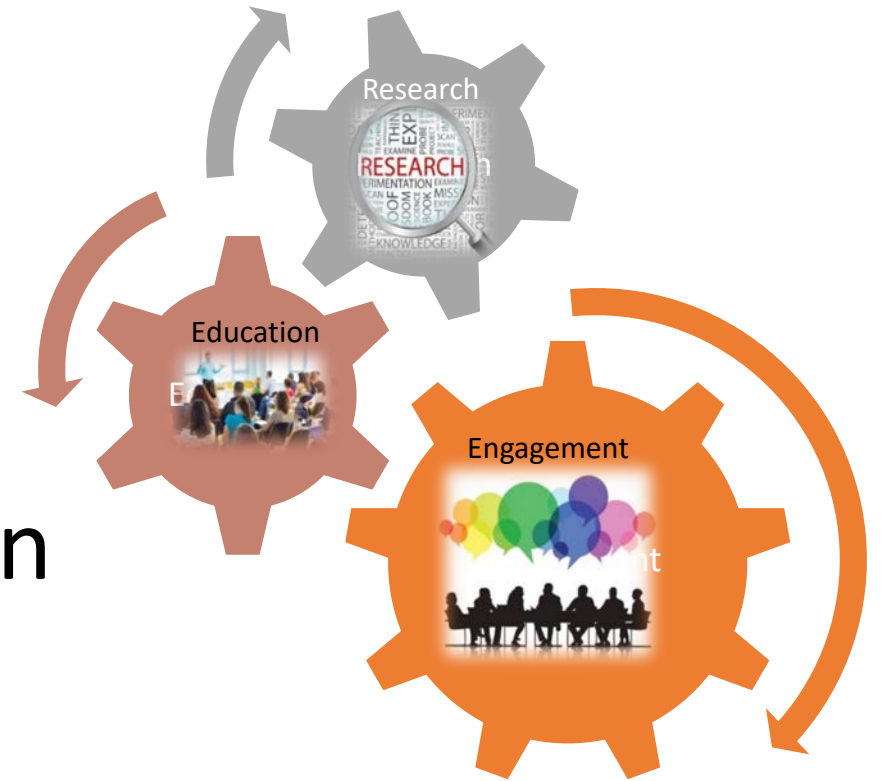
VISION:

NC State University will partner with a **consortium of Universities and organizations to advance Regulatory Science in the US and the world.**



Goals of the Center

- **Raise awareness** of regulatory challenges;
- **Increase cooperation** and collaboration among stakeholders;
- **Address important challenges** in an unbiased manor;
- **Educate the next generation** of regulatory scientists



Coming in 2019

- CERSA will hold first Board of Advisers Meeting in March 2019
 - ✓ **Accepting nominations for Board members**
- New Certificate Program for **Regulatory Science in Agriculture** (available via Distance Education) Fall 2019
- Launch a new **Summer Internship Program** for students (pending funding)
 - ✓ **Seeking industry, NGO, state, and federal partners to host summer interns**
- Planning for 2019 **Innovation and Regulation in Agriculture Workshop**