



# **G2F Initiative Lobbying and Funding Overview**

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[www.Genomes2Fields.org](http://www.Genomes2Fields.org)

# G2F Funding

## Two levels

- Short Term - Keeping the wheels on, esp. the Science Project (GxE Trial)
  - Corn Boards
  - In-Kind, Grants
  - USDA-ARS and NIFA funding
- Long Term – significant funding, \$ millions along the lines of the National Plant Genome Initiative
  - Federal Level Lobbying effort



# Overall G2F Funding - 2017

- ICPB \$500,000
- Other state corn boards and NCGA \$393,812
- NIFA grants  
\$1,500,000
  - 2016 Commodity Board Corn Program
- USDA-ARS  
\$1,250,000
- In-kind support from cooperators Priceless!
  - University and USDA-ARS
  - Thank you everyone!
- Total  
\$3,643,812



Computer scientist

Engineers

Mathematicians

Plant Scientists

Statisticians

Crop Modelers

Soil Scientists

Biologists

Bioinformaticians

Environtypers

# GENOMES TO FIELDS (G2F)

[www.genomes2fields.org](http://www.genomes2fields.org)

Modeling and  
analytical  
tools

HT phenotyping  
tools

Database  
development

**G X E  
Project**

Student Training



# Funding: NIFA Matching Program

- Iowa, Nebraska & Illinois Corn provided \$250,000 in matching funds for a phenotyping grant with USDA-NIFA
- NIFA provided a \$250,000 match for \$500K grant on phenotyping
- 5 proposals submitted, all were deemed acceptable but three were ranked Outstanding and were funded
  - These three were all ranked in top 8 out of 62 overall proposals
- NIFA asked us to choose 1 to fund
  - We selected the ISU proposal (Schnable, Dong)
- NIFA funded the other two with their regular program funds
  - Texas A&M (Murray)
  - UNCW (Stapleton)
- A total of \$1.5 million went to corn phenotyping projects as a result of this commodity board program



# Genomes to Fields Corn Board

## Sponsors



# Federal Lobbying Effort

- G2F Government Relations group working with House Ag Committee on revised language to the Farm Bill
  - Includes Iowa State, Wisconsin, Penn State staff
  - Rewording the “Agricultural Genome Initiative” into an “Agricultural Phenomes to Genomes Initiative”
  - Been in Farm Bill since 1990
  - Asking \$30 million per year for 5 year Farm Bill

## **Sec. 1671. [7 U.S.C. 5924] AGRICULTURAL GENOME TO PHENOME INITIATIVE**

(a) GOALS.—The goals of this section are—

- (1) to expand knowledge concerning genomes and phenomes of crops of importance to the U.S. agriculture sector;
- (2) to understand how variable weather, environments, and production systems impact the growth and productivity of specific varieties of crops, thereby providing greater accuracy in predicting of crop performance under variable growing conditions;
- (3) support research that leverages plant genomic information with phenotypic and environmental data through an interdisciplinary framework, leading to a novel understanding of plant processes that affect crops growth, productivity and

# Federal Lobbying Effort

- NCGA working with 10 other commodity groups to build a lobbying coalition for phenotyping funding at federal level
- Iowa Corn coordinating these two efforts





# 2017 Federal Budget

- Submitting Program and Report Language into House and Senate 2018 budget – Sen Baldwin (Wisc)

**FY17 Senate Appropriations-** Genomes to Fields. The Committee encourages ARS to expand the Germplasm Enhancement of Maize [GEM] project and has provided \$1,250,000 to complement the existing USDA maize germplasm programs and support the emerging large-scale public sector effort to investigate the interaction of maize genome variation and environments, known as the Genomes to Fields project.

- Made it into the 2017 Federal Budget and funds have been made available



# Language in 2018 Senate Budget

- U Wisc worked with Sen. Baldwin to add language to the 2018 Senate Ag Appropriations Bill
  - Baldwin is on Senate Ag Appropriations Committee
- *Genomes to Fields*.—The Committee recommendation includes no less than the fiscal year 2017 level to expand the Germplasm Enhancement of Maize [GEM] project to complement the existing USDA maize germplasm programs and support the emerging largescale public sector effort to investigate the interaction of maize genome variation and environments, known as the Genomes to Fields project.



# Language in 2018 House Budget

- ICGA and Iowa State submitted report language to Rep David Young's office - Made it into 2018 House Ag Appropriations Bill
  - Young is on House Ag Appropriations Committee
- *Leveraging Plant Genome Information.—The Committee recognizes the potential impact that variable weather, environments and production systems can have on the yield and quantity of maize and the need for greater prediction of plant performance under variable growing conditions. The Committee encourages USDA to support research that leverages plant genomic information with phenotypic and environmental data through an interdisciplinary framework, resulting in an understanding of plant processes that affect productivity and the ability to predict plant performance.*



# Next Steps

- Finalize language for Farm Bill request
  - Advocate legislators to include changes in Farm Bill
- Continue to advocate for USDA-ARS funding in 2018 budget
- If Farm Bill language makes it into final Farm Bill, advocate for appropriations to fund it
- Continue to apply for grants leveraging the G2F Brand



Discussion  
Questions?

**the big idea**

phenotyping

