#### Agricultural Research, Education, Extension and Tech Transfer

## AGREETT

Minnesota House Agriculture, Finance and Policy Committee

January 12, 2023



#### Minnesota Chooses to Invest in Ag R&D

AGREETT: Mn. Stat. 2015 Supplement Section 41A.14, Amended 2016

#### Key Features:

- Purpose: support agricultural productivity growth through research, education and extension through long-term base funding.
- Priority: "human infrastructure"
- Advisory Panel:
  - Co-Chaired: Commissioner and College of Food, Agricultural and Natural Resource Sciences Dean.
  - Panel Representatives: MSCU, Farm Bureau, Farmers Union,
     Statewide Ag, Commodity Councils, Forest Products, Organic or Sustainable Ag, Statewide Env. And Nat. Res.

## AGREETT funds work hard for Minnesota

CFANS and Vet Med faculty and Extension Educators — "Human Infrastructure"



Rapid Response Funds — Critical and Timely Needs

Avian Influenza Research



## Investment Strategy: Doing the Most Good for the Most People

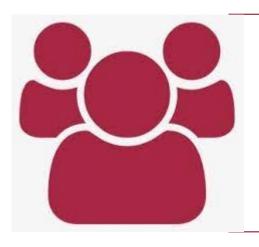
AGREETT is to provide investments that will efficiently achieve "long-term agricultural productivity increases" through improved infrastructure, vision and accountability. Grants shall provide for "long term base funding" that allows the research grantee to continue the research to its practical conclusion.



## Game Changing Capacity and Collaboration Research, Teaching and Extension 19 CFANS Faculty

of those there are

## 8 Extension Specialists



**5 CVM Faculty** 

of those there are

2 Extension Specialists

11 Extension Educators

## AGREETT engages critical research and education needs

for a healthier, more sustainable State



Development New Crops for Environmental Health & Profits





Combating antimicrobial resistance in livestock production





Food Safety Training for Produce Farmers

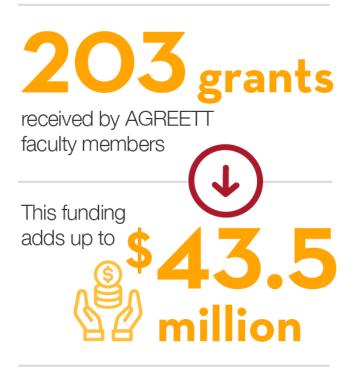


## AGREETT Benefits All Minnesotan's Through Research, Outreach and Extension Centers





## External Grants Leverage AGREETT Impact



#### Sample Sources:

- USDA, NIFA
- USDA, NRCS
- National Science Foundation
- National Inst. of Health
- Zoetis
- University of Wisconsin
- National Pork Board
- National Cattlemen's Beef Association

Presentation 2021 MN State House of Representatives Ag Committee

https://www.house.leg.state.mn.us/hjvid/92/893525 (URL if link above doesn't work)

## Demonstrated Return on Investment for Minnesota as People Adopt Innovation

**\$40.6** in total returns in Minnesota for every **\$1** invested > \$21 to \$1 average in other states. Attributed to Minnesota's natural resource suitability and climate. Minnesota should be a key investor.





### Representative AGREETT Faculty









Heidi Roop Soil, Water and Climate, Extension Specialist

Annie
Klodd
Fruit and
Vegetable
Production

Jacob
Jungers
Agronomy
and Plant
Genetics

Noelle Noyes
Vet. Population
Medicine
Antimicrobial
Resistance
Management
Extension

Climate impacts stress our infrastructure, environment, and social & economic systems.



**Heidi Roop**CFANS, Soil, Water and Climate,
Extension Specialist

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Annie Klodd
Fruit and Vegetable
Production
--Extension Educator

Responding to Hmong farming community's interest in more perennial, high value crops



## Jacob Jungers, CFANS Agronomy & Plant Genetics

#### **Undergraduate education**

Connect STEM students to career opportunities in Ag



*Increase the profitability and sustainability:* 

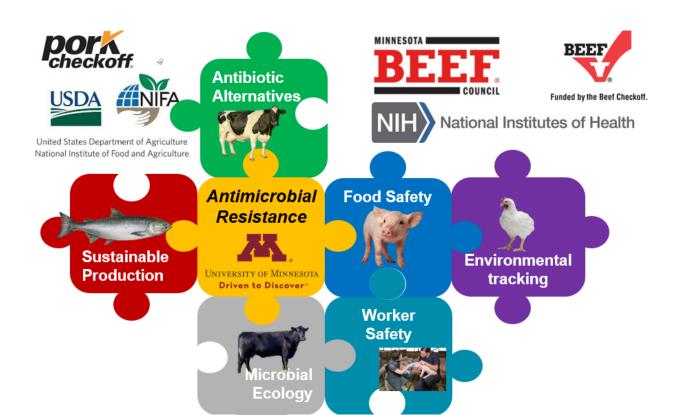
Development of new crops – Kernza Strategic placement for clean drinking water





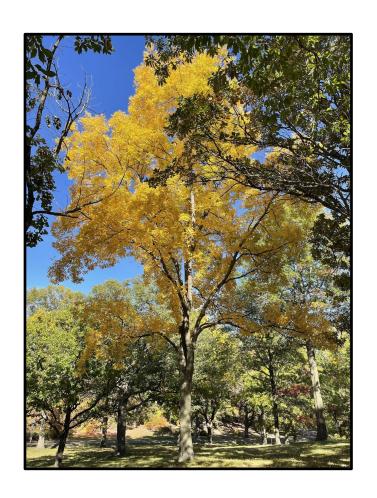
needs and deep roots leads to virtually no

### Noelle Noyes, Veterinary Medicine





# Noelle Noyes Vet. Population Medicine Antimicrobial Resistance Management



# Cold Climate Perennial Specialty Horticultural Crops

Brandon M. Miller, Ph.D.

**Assistant Professor** 

Department of Horticultural Science

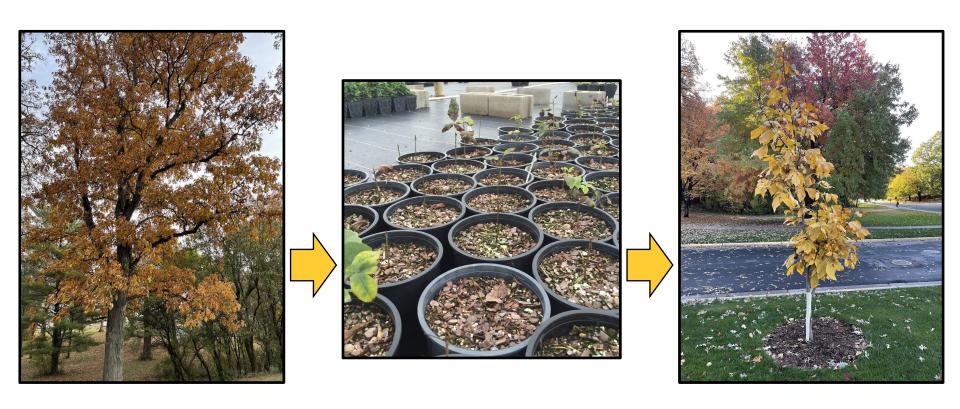
&

Curator of Plant Collections
Minnesota Landscape Arboretum
University of Minnesota



More Frequent and Severe Weather Events

# Facilitating Crop Development and Use

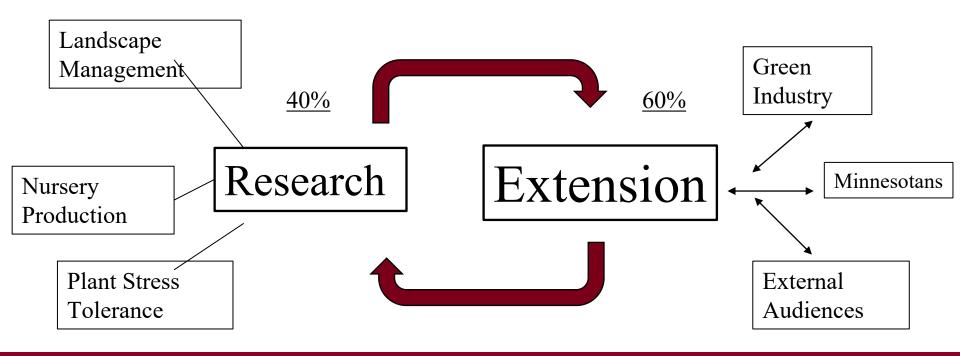


Left to right: wild shagbark hickory, young shagbark hickory nursery crop, and first-year transplant shagbark hickory.



## Center for Winter Hardy Landscape Plants

**Goal**: to identify, characterize, and develop novel and underutilized plants as new nursery and landscape crops suited to cultivation in cold climates.



## Outreach and Deliverables









# Thank you...and our agricultural and food partners



Agreett.umn.edu



University of Minnesota

Driven to Discover<sup>™</sup>