Agricultural Research, Education, Extension and Tech Transfer $\begin{tabular}{l} AGRETT \\ \end{tabular}$

Minnesota House Agriculture, Finance and Policy Committee March 3, 2021





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 representative.
 - 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

Faculty and Extension Educators — "Human Infrastructure"

Rapid Response Funds – Critical and Timely Needs

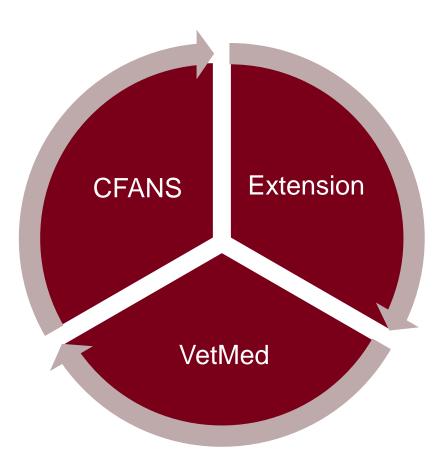
Avian Influenza Research



Game Changing Capacity and Collaboration Research, Teaching and Extension

11 Extension Educators Across MN

19 Faculty: Research, Teaching and Extension





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





University of Minnesota Driven to Discover™



AGREETT Benefits All Minnesotans Through Research, Outreach and Extension Centers



External Grants Leverage AGREETT Impact

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faculty members

This funding

adds up to

received by AGREETT

grants

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



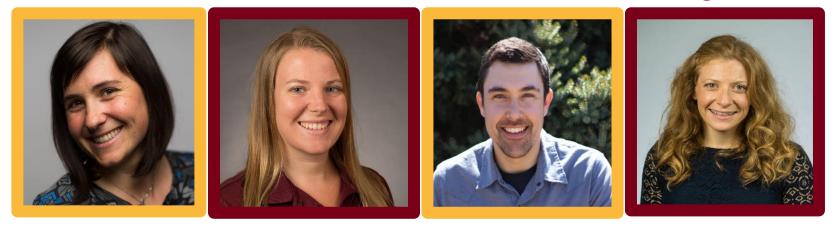
Demonstrated Return on Investment for Minnesota

\$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.



Meet 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.



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Our exposure to these impacts is largely dependent upon how well we <u>understand</u> and <u>manage</u> them.

Images: Google Earth



With AGREETT funding, our expanded climate programming is:



Providing trusted, place-specific climate information



Working to expand resilience & adaptation planning across scales & time horizons



Championing climate literacy in communities & classrooms



MCAP is the only multi-sector, statewide group working on climate adaptation.

Images: H.Roo





A systems- and people-centered approach.

Supporting climate preparedness solutions that for work for all Minnesotans—across geographies, scales, and sectors.



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Annie Klodd – Fruit & Vegetable Crop Extension

Supporting apple, berry & wine grape growers to develop

emerging markets

Fruit & Veg News: 903 subscribers 128,789 views





2020 webinars: 1,650 reached

Hard Cider Apple Variety Evaluation



Annie Klodd – Fruit & Vegetable Crop Extension

Helping U-Pick fruit farms operate safely during COVID-19





Annie Klodd – Fruit & Vegetable Crop Extension

Repurposing hail netting to minimize insecticide use on apple orchards – MDA AGRI Crop Research Grant







Annie Klodd – Fruit & Vegetable Crop Extension

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





Bio:

- 1st Generation College Graduate
- 50% teaching / 50% research
- Train the next generation of agriculturalists
- Make ag more profitable and sustainable





Undergraduate education

Connect STEM students to career opportunities in

Ag





Undergraduate education

Connect to rural high school students





Increase the **profitability** and **sustainability** of agriculture in MN

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





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- \$10 million USDA grant on Kernza
- Results include new businesses and farmer coop





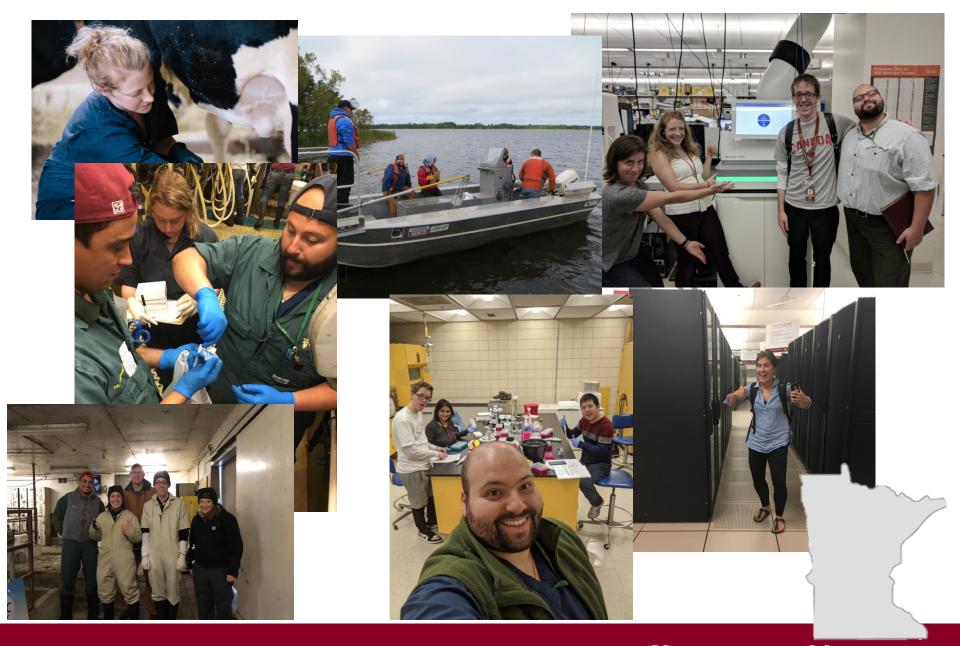


Noelle Noyes, Veterinary Medicine





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National and International Activity





Thank you...and our agricultural and food partners

Questions?

Agreett.umn.edu

