

FFAR Update on ICASA Research

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**USAHA Pharmaceutical Issues Subcommittee
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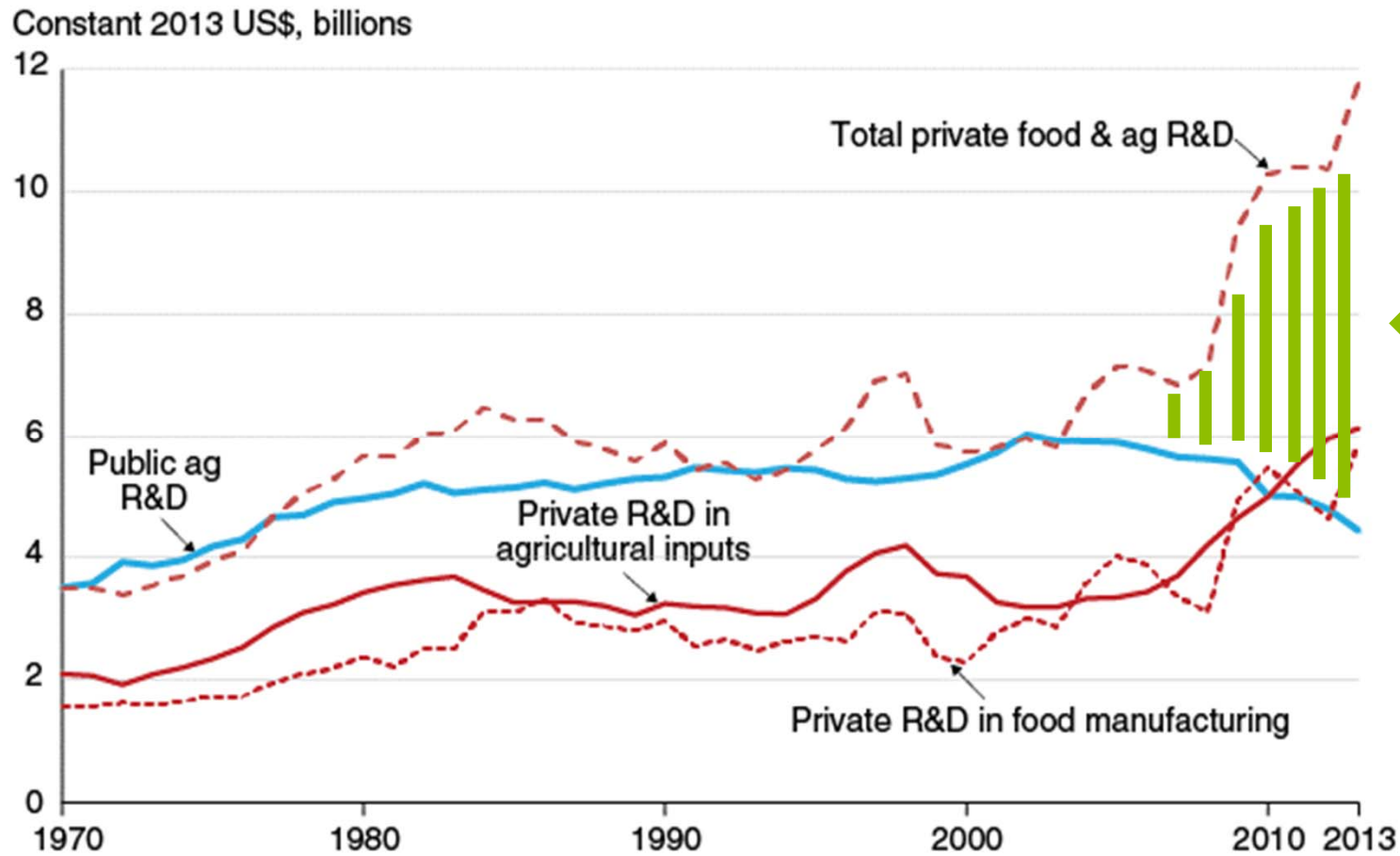


New Opportunities for Agricultural Research Funding

Static Federal funding and
increased private research
investments has led to new
funding models and
opportunities



The FFAR model leverages private funds for public good



Source: USDA ERS





How We Work



Private-Public Partnerships

We build unique partnerships to support innovative science addressing today's food and agriculture challenges.

\$385M + **\$385M**

FFAR
Investment

Non-Federal
Match

// FFAR also brings together **diverse groups** that might not otherwise collaborate to **solve big challenges** ...the FFAR model delivers - and **doubles the taxpayer's investment.** //

-Bob Stallman

*Past President, American Farm Bureau Federation
Current FFAR Board Member*

Industry and Foundation

Partners Include:

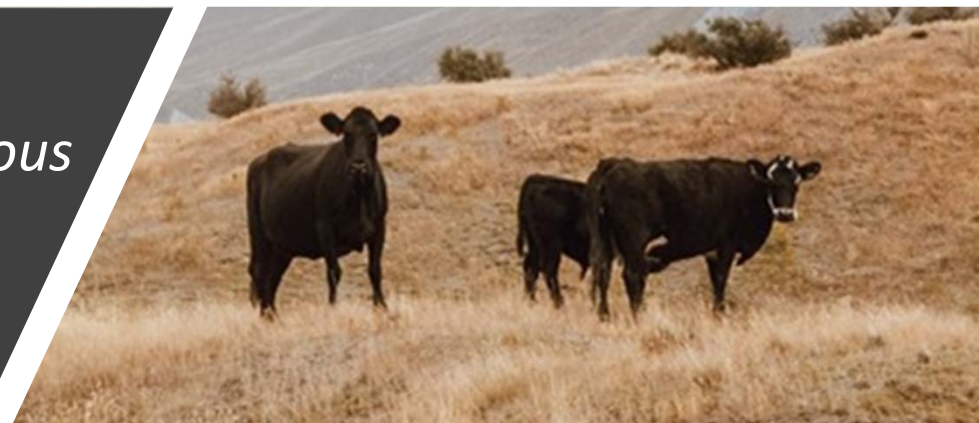


The International Consortium for Antimicrobial Stewardship in Agriculture



Supporting the development of tools and management solutions that promote judicious antibiotic use and healthier livestock.

- ICASA offers a mechanism for leveraging private-sector investments in animal health and stewardship projects.
- FFAR has committed \$7,500,000 matching funds for actionable research on antibiotic stewardship.



How Does the Program Work?



Executive Committee



Working Groups:

- Liver abscesses
- Metaphylaxis
- Late BRD
- Swine
- Technologies



- Project “eligibility”: Every project must have at least 2 participating organizations in addition to FFAR
- And review and approval by majority of Executive Committee



Collaboration Across the Supply Chain

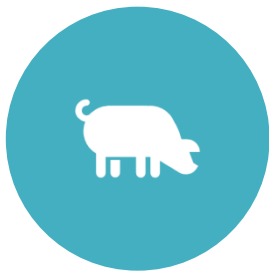


(Rotating *Ex-officio*)

Potential for Large-Scale Impact



~**40%** of all fed beef cattle marketed in the U.S.



~**33%** of all sows in the U.S.



3 of the largest protein companies in the world



2 associations representing **>85,000** livestock producers



2 non-profit research foundations





ICASA'S VISION: Research that has *practical outcomes for industry*



Example Project: Identifying potential causes of late-day morbidity in high-performing feedyard cattle

Veterinary Research and Consulting Services

Noble Research Institute

Hy-Plains Education and Research Center

U.S. Meat Animal Research Center (USDA)

Great Plains Veterinary Education Center (University of Nebraska)



Background

- Genetic selection for high-performing cattle:
 - High ADG
 - Improved feed efficiency and carcass quality
- Anecdotal observations of increased incidence of BRD 60 to 90 DOF
 - Results in significant antibiotic use
 - Estimated morbidity / mortality rates approaching 10% / 2%
 - Morbidity detracts from the advantages of selecting genetically superior animals; significant resources invested
- No formal studies have been performed evaluating potential causes of morbidity in high-performing cattle

Approaches

- The project will evaluate rate of gain at the feedyard and backgrounding phase on health and performance outcomes.
- A prospective study will collect (n=1000):
 - DNA for genetic evaluation (Neogen GeneSeek 50K)
 - Nasal swabs for bacterial and viral analysis (Bovine viral diarrhea virus, bovine corona virus, and *Mannheimia haemolytica* pathogens)
 - Blood samples for cytokine analysis and heart and lung tissues will be collected at slaughter for evaluation.
- Feed intake (GrowSafe), rumen pH and temperature will be measured on a subset of intensively sampled animals (n=60).
- In addition to an industry workshop, results will be widely distributed across the industry.

Conclusions and Future Directions

- **FFAR has made substantial progress in supporting research in collaboration with the animal agriculture industry.**
- **We anticipate many impactful antibiotic stewardship projects to be launched through ICASA.**
- **We appreciate the ICASA Participants for their efforts to collaborate and make meaningful contributions towards this important issue.**





Thank You

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Connect with FFAR

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