

Alternatives to Antibiotics: Extramural Research

Dr. Mervalin Morant, NIFA/USDA

PACCARB

Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria



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Research, Education, and Economics (REE)

National Institute of Food
and Agriculture (NIFA)
Extramural

Agricultural Research
Service (ARS)
Intramural

National Agricultural
Statistical Service (NASS)

Economic Research
Service (ERS)



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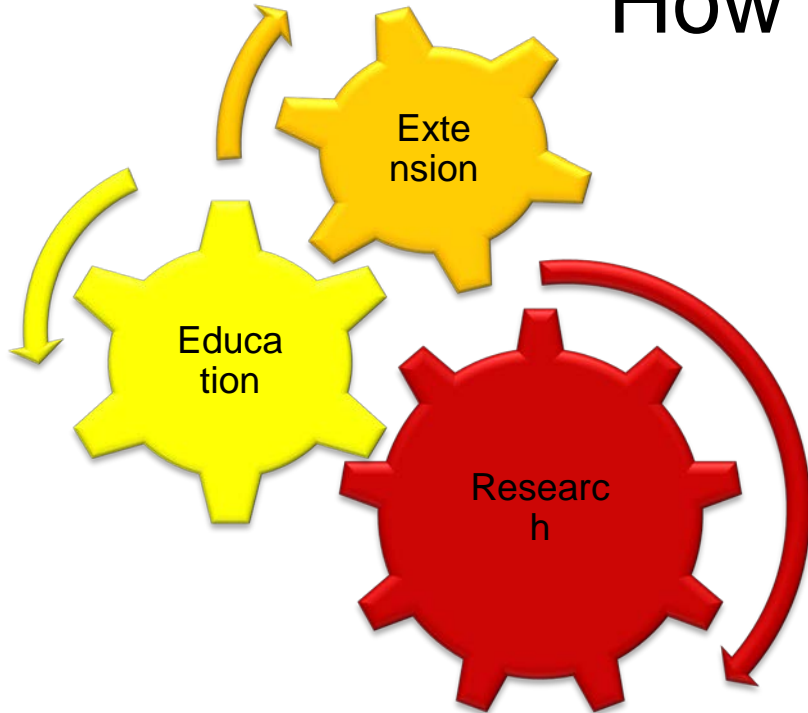
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NIFA's Mission

***Invest in and advance agricultural research,
education, and extension to solve societal
challenges***

How we do it.....



- Research – Fundamental & applied research enable discovery of solutions to complex problems of regional, national, and global importance
- Education (Formal) - Curriculum design, Instruction delivery system, Train the next generation
- Extension (Non-formal) - Takes knowledge gained through research and education directly to people



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Where's AMR Program?

Challenge Area

Effective Antimicrobial Resistance

Foundational Program

Understanding Antimicrobial Resistance



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AMR RFA Language incl.

- ...New, improved and innovative solutions to this complex problem must be addressed by inter-disciplinary teams.. using a systems approach
- At ecosystem level
- Better understand, characterize & mitigate AMR across the food chain



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AMR History

- 2012/13: 2 Std; 1 Conf ~\$3M available
- 2014: \$2.25M/Award (5 Std; 1 Conf)
~\$5M available; Continuations
- 2015: \$1M/Award (3 Std; 3 Seed)
~ \$5M available
- 2016: ~\$6M available – Challenge
~ \$1M available - Foundational



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Funded Projects (examples)

- D. Aga: Univ of Buffalo
- A. Howe: Iowa State Univ
- A. Pruden: Virginia Tech
- K.C. Jeong: Univ of Florida
- Morley: Colorado State Univ
- Singer: Univ of MN
- Sischo: Washington State Univ
- H. M. Scott: Kansas State & Texas A &M Univ



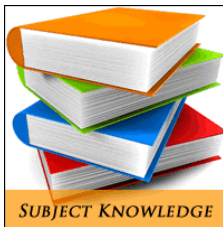
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Funded AMR Projects

- [http://cris.nifa.usda.gov/cgi-bin/starfinder/0?path=fastlink1.txt&id=anon&pass=&search=\(GC=A4171\)&format=WEBTITLESGIY](http://cris.nifa.usda.gov/cgi-bin/starfinder/0?path=fastlink1.txt&id=anon&pass=&search=(GC=A4171)&format=WEBTITLESGIY)



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– research & education
- Current Research Information System (<http://cris.nifa.usda.gov>)
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