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USDA Funding Opportunities Foundational Food Safety, Nutrition and Health

Deirdra N. Chester, PhD, RDN

National Program Leader, Applied Nutrition Research

USDA/NIFA/Institute of Food Safety and Nutrition

Morehouse School of Medicine Webinar

USDA – NIFA

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Agriculture and Food Research Initiative Competitive Grants Program

- AFRI is the USDA competitive grant program designed to provide fundamental and applied research, education and extension projects in food and agricultural sciences. There are two key program areas:
- **Challenge Area Programs-Integrated**
- Foundational Programs- Basic Research



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AFRI Foundational Program

- Project type – predominantly research
 - Predominantly fundamental research
- Grant types – Standard, FASE, Conference
- Key Program Area Priorities – (generally very broad)
 - don't change markedly from year to year



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AFRI Foundational Program: Program Area Priorities, FY 2016

- Food Safety, Nutrition, and Health
 - Improving Food Quality- soliciting FASE, Standard and conference grant applications
 - Function and Efficacy of Nutrients- soliciting FASE, Standard and conference grant applications
 - Improving Food Safety- soliciting FASE, Standard and conference grant applications
 - Understanding Antimicrobial Resistance – soliciting FASE, Standard and conference grant applications



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AFRI

Improving Food Quality Program

Jodi P. Williams, Ph.D.

National Program Leader, Food Safety



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AFRI –Improving Food Quality Program

Where do we find it?

AFRI Foundational RFA

Food Safety, Nutrition and Health –
Program Area

A1361- Improving Food Quality

Improving Food Quality Priorities

- Utilizing processing and packaging technologies to improve the quality of foods
- Understanding the biological, chemical, and physical interactions of food and food ingredients to improve the quality of foods

What does quality mean?

Shelf-life

**Nutrient
Value**

**Economic
Value**

Convenience

**Sensory
Qualities**

Sustainability



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Improving Food
quality does not fund
pre-harvest or food
safety projects.

A large red prohibition sign (a circle with a diagonal slash) is superimposed over the text 'Pre-harvest'. The text is in a bold, brown, sans-serif font.

Pre-harvest

A large red prohibition sign (a circle with a diagonal slash) is superimposed over the text 'Safety'. The text is in a bold, brown, sans-serif font.

Safety



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Program Area: Improving Food Quality

FY 2015

- Number of Proposals – **108**
- Number of Awards – **12** (including seed and/or equipment)
- Success rate – **11%**
- Average Award Size - **\$428,905**



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Program Contact, Improving Food Quality

Jodi P. Williams, Ph.D.

National Program Leader, Food Safety

jwilliams@nifa.usda.gov

(202) 720-6145



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AFRI Function and Efficacy of Nutrients Program

Deirdra Chester, Ph.D., RDN
National Program Leader, Applied Nutrition
Research



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AFRI Foundational – Function and Efficacy of Nutrients

- Program Area Priority

- Investigate the role of bioactive components of food in preventing inflammation or promoting gastrointestinal health
 - Justification must be provided for the relationship of the bioactive component(s) being studied to human health outcomes
 - Priority will be given to projects that use a whole food approach or that address health effects of a combination of two or more bioactive components found in food.
 - The whole food approach may also be one that adds enrichment, fortification or micro- and nano-encapsulation to enhance bioavailability of bioactive components in food.



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Program Area: Function and Efficacy of Nutrients FY 2015

- Number of Proposals – 68
- Number of Awards – 12 (including seed)
- Success rate – 18%
- Average Award Size - \$492,149



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Program Contact, Function and Efficacy of Nutrients

Deirdra Chester, PhD, RDN

National Program Leader, Applied Nutrition
Research

dnchester@nifa.usda.gov

(202) 401-5178



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Understanding Antimicrobial Resistance Program – A1362

Mervalin Morant, Ph.D.
National Program Leader, Food Safety



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Understanding Antimicrobial Resistance

- Program Area Priority
 - Conduct research to improve our knowledge and understanding of the basic science that underpins the development and functionality of alternatives to traditional antimicrobials currently used in agriculture. This will mitigate the emergence of antimicrobial resistance in crops and animals or the spread of antimicrobial resistance across the food chain
- Broad interpretation – “understanding AMR
- Pathogen control targeted? Submit to Improving Food Safety



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Program Contact: Understanding Antimicrobial Resistance

Mervalin Morant, Ph.D.
National Program Leader, Food Safety
mmorant@nifa.usda.gov
(202) 401-6602



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Improving Food Safety A1331

- Isabel Walls, Ph.D.
- National Program Leader, Food Safety



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Program Area Priority

- **Improving Food Safety - \$500,000 total per project**
- **Research only proposals were due August 10TH, 2016**

- **Novel concentration/ purification methods for isolation of pathogens from foods**
- **Foodborne hazard detection methods**
- **Control strategies for foodborne hazards**
- **Identify and characterize emerging or under-researched foodborne hazards**
- **Improved diagnostic methods for peanut and food allergies**



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Program Contact Improving Food Safety

Isabel Walls, Ph.D.

National Program Leader, Food Safety

iwalls@nifa.usda.gov

(202) 401-6357



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Additional Program Area Initiatives

- Critical Agricultural Research and Extension **(CARE)** – local, regional or national problems; yield solutions quickly; rapidly implemented by producers
- Exploratory – new and emerging innovative ideas; application of new knowledge or approaches; tools required for paradigm shift; rapid response to natural disasters
 - **high-risk, high-reward; proof-of-concept; transformative**



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Contact Information

Deirdra Chester, Ph.D., RDN
National Program Leader
dnchester@nifa.usda.gov
(202) 401-5178
<http://www.nifa.usda.gov>