USDA –
National Institute of Food and Agriculture
AFRI Training and New Investigator Grants

Mallory M. Koenings, PhD, RDN
Program Specialist
Institute of Food Safety and Nutrition
Division of Nutrition

IFSN Seminar Series – January 2016
Competitive Grants Programs

- Training Grants
  - Multicultural Scholars
  - Higher Education Challenge Grants
  - Women and Minorities in Science, Technology, Engineering, and Mathematics Fields (WAMS) Grants
- Education and Literacy Initiative – Undergraduate Fellowships

- Fellowships
  - National Needs Fellows
  - Education and Literacy Initiative – Doctoral (PreDoc) Fellowships
  - Education and Literacy Initiative – Post Doctoral Fellowships
TRAINING GRANTS

- Multicultural Scholars
- Higher Education Challenge Grants
- Women and Minorities in Science, Technology, Engineering, and Mathematics Fields (WAMS) Grants
- AFRI Education and Literacy Initiative – Undergraduate
Multicultural Scholars

- Undergraduate scholarships to students from underrepresented groups to pursue and complete **baccalaureate degrees** in the Food, Agricultural, Natural Resources, and Human Sciences, or achieve a **D.V.M.**

- 2-4 years

- $6,500 /student/year; + $2,500 /student/year for cost of education allowance

- Student Experiential Learning (SEL) – One-time $4,000 for each eligible USDA Multicultural Scholar

**Award Max:** $200,000

**Success Rate:** 24%

**Contact:** Ray Ali rali@nifa.usda.gov
Higher Education Challenge Grants

- To improve formal, **baccalaureate or master’s degree** level food, agricultural, natural resources, and human sciences education and first **professional degree-level education in veterinary medicine (DVM)**.
  - Curriculum Development, Instructional Delivery Systems and Expanding Student Career Opportunities
  - Faculty preparation and enhancement for teaching.
  - Facilitating Interaction with Other Academic Institutions

**Award Max:** $ 750,000
**Success Rate:** 20%

**Contact:** Antonio McLaren  antonio.a.mclaren@nifa.usda.gov
Women and Minorities in Science, Technology, Engineering, and Mathematics Fields (WAMS) Grants

- Research and extension projects

- Increase participation by women and underrepresented minorities from rural areas in STEM in the context of food, agricultural, natural resources, and human sciences

- Educational institutions, private organizations, and others

Award Max: $150,000 - $300,000
Success Rate: 20%
Contact: Saleia Afele-Faamuli sfaamuli@nifa.usda.gov
AFRI Undergraduate Fellows

- **Integrated:** Research, Education, and Extension based experiential learning for undergraduates such that upon graduation they may enter the agriculture workforce with exceptional skills.

- Provides opportunities for students from underrepresented and economically disadvantaged groups at minority-serving institutions, community colleges, and four-year colleges and universities to obtain **hands-on experience and training at larger universities and USDA laboratories.**

**Award Max:** $ 300,000  
**Success Rate:** 13.8%  
**Contact:** Victoria LeBeaux  
undergraduate@nifa.usda.gov
FELLOWSHIP GRANTS

- National Needs Fellows
- **AFRI** Education and Literacy Initiative – Doctoral (PreDoc)
- **AFRI** Education and Literacy Initiative – Post Doctoral
National Needs Fellows

Fellowships for **MS & PhD** level students in the following areas:

- Animal & plant production
- Forest resources
- Agricultural educators & communicators
- Agricultural management & economics
- Food science & human nutrition
- Sciences for agricultural biosecurity
- Training in integrative biosciences for sustainable food & agricultural systems

**MS** - $18,500/student/year, for 2 years

**PhD** - $24,500/student/year, for 3 years

Special International Study Stipend for current fellows up to $4,500/MS student and $8,000/PhD student

**Award Max:** $262,500  
**Success Rate:** 21%  
**Contact:** Ray Ali rali@nifa.usda.gov
AFRI Pre-Doctoral and Post-Doctoral Fellows

- Pre-doctoral and post-doctoral fellowships to prepare the next generation of research, education, and extension professionals.

  - Pre-Doc -- Technical and functional competence
  - Post- Doc -- Research independence and teaching credentials

Pre: $79,000
Post: $150,000

Success Rate: 17%

Contact: Ray Ali
rali@nifa.usda.gov
AGRICULTURE & FOOD RESEARCH INITIATIVE

- **AFRI** Education and Literacy Initiative – Undergraduate
- **AFRI** Education and Literacy Initiative – Doctoral (PreDoc)
- **AFRI** Education and Literacy Initiative – Post Doctoral
Boosting the Ag Industry in the U.S. Virgin Islands
Below is a list of our competitive RFAs. Use the grant search page to learn more about available grant opportunities.

- Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship (NNF) Grants Program
- Integrated Research, Education, and Extension Competitive Grants Program - National Integrated Water Quality Program (NIWQP)
- (Closed) 2015 - Agriculture and Food Research Initiative - Childhood Obesity Prevention Challenge Area
- 1890 Facilities Grants Program (Renewals)
- 1890 Institution Teaching, Research and Extension Capacity Building Grants (CBG) Program
- 1994 Land-Grant Research Leadership Development Initiative
- AFRI Foundational: Agriculture Economics and Rural Communities
Find “education”
Food, Agriculture, Natural Resources and Human Sciences Education and Literacy Initiative

2016 Request for Applications (RFA)

Predoctoral Fellowships
APPLICATION DEADLINE: February 11, 2016

Postdoctoral Fellowships
APPLICATION DEADLINE: February 11, 2016

Professional Development Opportunities for Secondary School Teachers
APPLICATION DEADLINE: March 18, 2016

Research and Extension Experiential Learning for Undergraduate (REEU)
AFRI Competitive Grants

Agricultural & Food Research Initiative

Food, Agriculture, Natural Resources and Human Sciences Education and Literacy Initiative

Foundational Area - Basic Research

Challenge Area - Integrated

Function & Efficacy of Nutrients

Childhood Obesity Prevention

Undergraduate Research and Extension Experiential Learning Fellowships

Pre-doctoral Fellowships

Post-doctoral Fellowships

Professional Development
Education and Literacy Initiative

- Seeks talented, highly-motivated undergraduate, doctoral, and postdoctoral students that demonstrate remarkable promise and the potential to become exceptional education, extension, and research professionals in the United States.

- Promote research and extension experiential learning for undergraduates such that upon graduation they may enter the agriculture workforce with exceptional skills.

- Develop technical and academic competence of doctoral candidates.

- Prepare research independence and teaching credentials of post-doctoral fellows.
Important Definitions

**Undergraduate** – must have completed at least one full-time semester at the associate’s or bachelor’s level.

**Doctoral Candidate** – documentation from a) graduate advisor or b) committee or c) institution that you have “advanced to candidacy, as per institutional requirements” by 11 February 2016.

**Postdoctoral Fellow** – documentation from a) graduate advisor or b) committee or c) institution that you “satisfied all doctoral degree requirements” after 1 January 2013 or before 11 November 2016.
Eligibility Criteria

- Mentor’s institution:
  - State Agricultural Experiment Stations
  - Colleges and universities (including junior colleges)
  - University research foundations
  - Other research institutions and organizations
  - Federal agencies
  - National laboratories
  - Private organizations or corporations
  - Individuals
  - Any group of ≥2 of the above

- Applicants must be US citizens, nationals, or permanent residents of the United States.
Scientific Topics & Objectives

Agriculture & Food Research Initiative

Challenge Areas

Foundational Areas
Foundational Areas

- Plant Health and Production and Plant Products
- Animal Health and Production and Animal Products
- Food Safety, Nutrition, and Health
- Bioenergy, Natural Resources, and Environment
- Agriculture Systems and Technology
- Agriculture Economics and Rural Communities
Undergraduate Research & Extension
Experiential Learning Fellowships – Do’s

Success rate: 16%
Program Code: A7401
Letter of Intent requested

Funding ~1 out of 6 proposals
***Integrated only

Promote research and extension experiential learning for undergraduates such that upon graduation they may enter the agriculture workforce with exceptional skills.

May...

- **$300,000 total** over 4 years.
- $1,000/student/year Institutional allowance (in lieu of indirect costs)
- ≤30 undergraduate fellows/ award
- 2 years/fellow

Student support is the majority of the budget (stipends, housing, meals, travel, and laboratory fees)
AFRI ELI Undergraduate Fellowships
– Do not’s

May not…

- Charge an application fee
- Charge tuition or include tuition in the budget
- A student stipend may not exceed $500/week or $2,000/month
- Submit more than 3 proposals per institution
- Have more than 1 award (A7401) per institution
- Only support undergraduates at your institution. 50% of fellows must be students at another institution.
AFRI ELI Undergraduate Fellowships – Suggestions

Suggestions…

- Involve first and second year students
- Involve underrepresented students
- Include industry participation
- From **new collaborations or enhance existing partnerships** with:
  - Community colleges
  - Minority-serving institutions
  - Institutions where **research and extension** opportunities are limited
AFRI ELI Predoctoral Fellowships

Success rate: 16%
Program Code: A7101

Prepare the next generation of scientists through doctoral and post-doctoral fellowships. Funded projects will encompass the AFRI Challenge Area and AFRI Foundational Programs, through well-developed and highly engaged mentoring and training activities.

- $95,000 total over 2 years.
- $25,000/year stipend support.
- $19,500/year tuition, fees, & fringe benefits.
- $3,000/year Institutional allowance (in lieu of indirect costs).

Multi/Interdisciplinary Challenge Area proposals are encouraged.

Proposals involving industry participation are encouraged.

Forge mentorships with professionals (academe, industry, government, or others).

Fellow must be a US citizen, national, or permanent resident.

Funding ~1 out of 6 proposals
Research, Education, or Extension
Integrated***
AFRI ELI Postdoctoral Fellowships

Success rate: 16%  
Program Code: A7201

Funding ~1 out of 6 proposals  
Research, Education, or Extension Integrated***

Prepare the next generation of scientists through doctoral and post-doctoral fellowships. Funded projects will encompass the AFRI Challenge Area and AFRI Foundational Programs, through well-developed and highly engaged mentoring and training activities.

- $152,000 total over 2 years.
- $3,000/year Institutional allowance (in lieu of indirect costs).
- All other costs except salary may NOT exceed $30,000/year.

- Multi/Interdisciplinary Challenge Area proposals are encouraged.
- Proposals involving industry participation are encouraged.
- Projects should initiate an independent scientific program, rather than extend ongoing projects in the mentor’s laboratory.
- Fellow must be a US citizen, national, or permanent resident.
Tips for Success

1. Enter the correct **Program Code**
2. Don’t wait until the last minute
3. Follow directions  ***Integrated***
4. You are the Project Director (Pre-doc and Post-doc)
5. Successful proposals address all facets of the fellowship:
   - project plan (research, education, & extension)
   - mentoring plan
   - career development plan
   - evaluation plan
Food Safety, Nutrition, and Health applications comprise ~13% of fellowship awards.

AGRICULTURE & FOOD RESEARCH INITIATIVE

- **AFRI** New Program – Professional Development for Secondary School Teachers and Educational Professionals (PD-STEP)
- **AFRI** New Investigator Grant Type
AFRI Competitive Grants

- New Program – Professional Development for Secondary School Teachers and Educational Professionals (PD-STEP)
  - Provide immersive learning experiences
  - To create and replicate best practices to improve student success outcomes within the food, agricultural natural resources and human sciences.

- New Investigator **Grant Type**
  - Challenge Area Programs- Childhood Obesity Prevention
  - Foundational Area Programs- Function and Efficacy of Nutrients
2016 AFRI Education and Literacy Initiative
New Program – Professional Development for Secondary School Teachers and Educational Professionals (PD-STEP)

Program Code: A7501
Contact: Victoria LeBeaux

- Provide immersive learning experiences and to create and replicate best practices to improve student success outcomes within the food, agriculture, natural resources and human sciences (FANH).
  - $150,000 total over 3 years.
  - Indirect costs allowed.
  - May not submit more than 3 proposals per institution
  - May not have more than 1 award (A7501) per institution

- Collaboration involving industry and nonprofits.
- Connecting education professionals from low-resource schools to existing USDA/Federal resources.
- Build teachers’ skills for integrating FANH into their classes.
### Challenge Areas
- Global Food Security
- Water for Agriculture
- Childhood Obesity Prevention
- Food Safety
- Sustainable Bioenergy
- Climate Change

### Foundational Areas
- Plant Health and Production and Plant Products
- Animal Health and Production and Animal Products
- Food Safety, Nutrition, and Health
- Bioenergy, Natural Resources, and Environment
- Agriculture Systems and Technology
- Agriculture Economics and Rural Communities
Project Type & Grant Type

Proposal

Grant Type

Standard
CAP
Conference
FASE
Equipment
Sabbatical
Food and Agricultural Science Enhancement (FASE) Grant Types

Goal: To strengthen science capabilities in research, education, extension, and integrated programs.

Designed to help institutions develop competitive projects and to attract new scientists and educators into careers in high-priority areas of National need in agriculture, food, and environmental sciences.

Provide support for New Investigators
NIFA New Investigator Definition

- Beginning his/her career
- Does not have an extensive scientific publication record
- <5 years postgraduate, career-track experience
- A New Investigator may not have received competitively awarded Federal research funds, except pre- or postdoctoral grants or Seed Grants.
### 2015 Childhood Obesity Prevention

#### Project and Grant Types Solicited by this RFA

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Standard</th>
<th>CAP</th>
<th>Other (Collaborative)</th>
<th>Conference</th>
<th>Grant Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Food and Agricultural Science Enhancement (FASE) Grants¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strengthening Grants</td>
</tr>
<tr>
<td>Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sabbatical</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Equipment</td>
</tr>
<tr>
<td>Extension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Seed</td>
</tr>
<tr>
<td>Integrated²</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>Standard</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Conference</td>
</tr>
</tbody>
</table>

- **Colleges and Universities**
- **1994 Land-Grant Institutions**
- **Hispanic-serving Agricultural Colleges and Universities**
  - Hispanic-serving Institution NOT an 1862
  - Offers accredited agriculture-related degree programs (e.g., associates, bachelors)
# 2015 Function and Efficacy of Nutrients

## Project and Grant Types Solicited by this RFA

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Research</th>
<th>Education</th>
<th>Extension</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant Type</td>
<td>Standard</td>
<td>CAP</td>
<td>Other (Collaborative)</td>
<td>Conference</td>
</tr>
<tr>
<td>Standard</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CAP</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Other (Collaborative)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Conference</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### New Investigator
- **Food and Agricultural Science Enhancement (FASE) Grants**
  - Sabbatical
  - Equipment
  - Seed
  - Standard
  - CAP
  - Conference

### Strengthening Grants
- Standard
- Conference

---

- **State Agricultural Experiment Stations**
- **Colleges and universities (including junior colleges)**
- **University research foundations**
- **Other research institutions and organizations**
- **Federal agencies**
- **National laboratories**
- **Private organizations or corporations**
- **Any group of ≥2 of the above**

---

**RFA Part II. D.**

**RFA Part III. A.**

---

°FASE Grants have special eligibility requirements. Refer to Part II, D. 4 for eligibility and additional information.

*Note that ONLY Animal Health and Production and Animal Products Program Area (see Part I, C. 2) is soliciting Collaborative projects in this RFA.*

*Note that ONLY the Agriculture Economics and Rural Communities Program Area (see Part I, C. 6) and the Critical Agricultural Research and Extension Program Area (see Part I, C. 7) are soliciting Integrated Projects in this RFA.*
ILLUSTRATE
to the American people how research, education, and extension are improving lives.

REPORT
to Congress that NIFA-funded projects are making a difference.

INFORM
state and local governments about the ways their partnership betters their communities.

COMMUNICATE
to partners and stakeholders the opportunities available to educate the next generation.

ENABLE
USDA Leadership to make sound decisions regarding mission priorities.

Partner with NIFA to highlight your discoveries and accomplishments!

FOLLOW @USDA_NIFA & TWEET YOUR STORIES USING #NIFAIMPACTS

E-MAIL IMPACTSTORIES @NIFA.USDA.GOV

OR CALL THE IMPACTS COORDINATOR: 202-720-6133