

USDA
National Institute of Food and
Agriculture

Kathryn M. Jones
Florida State University
Department of Biological Science



USDA, National Institute of Food and Agriculture

- Competitive grants from USDA are through NIFA
- http://nifa.usda.gov/programs?search_api_views_fulltext=
- Major areas:
 - Plants
 - Animals
 - Human Health
 - Natural Resources and Environment
 - Farming and Ranching
 - Education
 - Business and Economics
 - Advanced Technologies in Food and Agriculture
 - International Development



USDA, National Institute of Food and Agriculture Agriculture and Food Research Initiative Foundational Programs

- AFRI Foundational Programs support six priority areas (these **can** change in Farm Bill renewals):
 - Plant health and production and plant products
 - Animal health and production and animal products
 - Food safety, nutrition, and health
 - Renewable energy, natural resources, and environment
 - Agriculture systems and technology
 - Agriculture economics and rural communities
- AFRI Challenge Areas (these **will** eventually change in Farm Bill renewals):
 - Agricultural and Natural Resources Science for Climate Variability and Change
 - Childhood Obesity Prevention
 - Food Safety
 - Food Security
 - Sustainable Bioenergy
 - Water Resources

USDA, National Institute of Food and Agriculture

Agriculture and Food Research Initiative Foundational Programs

- Funding lines vary greatly across programs and sub-programs
 - e.g. Some Food Safety areas fund 20% of applications
 - e.g. Understanding Plant-Associated Microorganisms (within Plant Health) funds 6%-9% of applications
 - **Postdoctoral fellowships**
 - **In 2014, 28/207 applications funded = 14%**
 - **Predoctoral fellowships**
 - **In 2014, 27/154 applications funded = 18%**
- These rates may improve; USDA would receive a substantial increase in the 2017 budget proposal

USDA, National Institute of Food and Agriculture

Pre-doctoral and Postdoctoral Fellowships Programs,

'Agriculture and Food Research Initiative - Food, Agriculture, Natural Resources and Human Sciences Education and Literacy Initiative' (**AFRI-ELI**)

- **Website:**

- <http://nifa.usda.gov/funding-opportunity/agriculture-and-food-research-initiative-food-agriculture-natural-resources-and>

- **Deadline** for 2016 Predoctoral and Postdoctoral Fellowships is March 3
- **Program Goal**--Prepare the next generation of scientists through fellowships for doctoral candidates & post-doctoral scholars
- **Current Funding Opportunity Number:** USDA-NIFA-AFRI-005576

USDA, National Institute of Food and Agriculture

- Fellowship applications must be in Foundational Program Areas or Challenge Areas
- Predoctoral Fellowships (program code A7101)
 - \$95,000 total
 - 2 years
 - \$25,000 stipend per year
 - \$19,500 tuition, travel, etc. per year
- Postdoctoral Fellowships (program code A7201)
 - \$152,000 total
 - 2 years
 - Funds primarily for salary
 - Up to \$30,000 allowed for other expenditures

USDA, National Institute of Food and Agriculture

Application process logistics:

- All NIFA and AFRI applications are through grants.gov
 - Contact the Grants Specialist in your department or FSU Sponsored Research for help from the Authorized Organizational Representative in setting up a **grants.gov** account
 - You must do this in order to download the full application package
 - Must use Adobe Reader with grants.gov packages (Preview and other pdf readers won't work)
 - Unfortunately, must be a citizen, national or permanent resident of the US
- Check for updates to the RFA up until the time of submission!!!! They can and will make substantial changes at the last minute, especially around the time of a new Farm Bill!!!!

USDA, National Institute of Food and Agriculture

NIFA/AFRI grant applications and grants.gov

- Ask for help from your mentor, your department grants specialist or Sponsored Research
- Download the current 'Fact Sheet' from the Sponsored Research website—this will give current version of much of the info needed for Cover sheet and Project Information sheet (examples below)

Save & Submit
Save
Print
Cancel
Check Package for Errors

Grant Application Package
Expiration Date: 06/30/2011

<p>Opportunity Title: Agriculture and Food Research Initiative: Foundational</p> <p>Offering Agency: National Institute of Food and Agriculture</p> <p>CFDA Number: 10.310</p> <p>CFDA Description: Agriculture and Food Research Initiative (AFRI)</p> <p>Opportunity Number: USDA-NIFA-AFRI-003958</p> <p>Competition ID:</p> <p>Opportunity Open Date: 10/15/2012</p> <p>Opportunity Close Date: 05/22/2013</p> <p>Agency Contact: NIFA Help Desk Phone: 202-401-5048 electronic@nifa.usda.gov Business hours are M-F, 7:00 am -5:00 pm ET, excluding Federal holidays</p>	<div style="border: 1px solid blue; background-color: #e0f0ff; padding: 5px; margin-bottom: 10px;"> <p>This electronic grants application be used to apply for the specific opportunity referenced here.</p> </div> <div style="border: 1px solid blue; background-color: #e0f0ff; padding: 5px;"> <p>If the Federal funding opportunity the opportunity for which you was close this application package by "Cancel" button at the top of this will then need to locate the correct funding opportunity, download its and then apply.</p> </div>
--	---

I will be submitting applications on my behalf, and not on behalf of a company, state, local or tribal government, academia, or organization.

* Application Filing Name: FSU_NIFA_Jones_02192013

Mandatory Documents	Mandatory Documents for Submission
<div style="border: 1px solid gray; height: 80px; width: 100%;"></div>	<p>SF424 (R & R)</p> <p>Research & Related Personal Data</p> <p>Project/Performance Site Location(s)</p> <p>Research And Related Other Project Informa</p> <p>Research And Related Senior/Key Person Pro</p> <p>NIFA Supplemental Information</p> <p>RR FedNonFed Budget</p> <p style="text-align: center; border: 1px solid black; display: inline-block;">Open Form</p>

Optional Documents

Research & Related Subaward Budget (Total Fed +

Optional Documents	Optional Documents for Submission
<div style="border: 1px solid gray; height: 80px; width: 100%;"></div>	<div style="border: 1px solid gray; height: 80px; width: 100%;"></div>

APPLICATION FOR FEDERAL ASSISTANCE
SF 424 (R&R)

3. DATE RECEIVED BY STATE: State Application Identifier

1. * TYPE OF SUBMISSION <input type="checkbox"/> Pre-application <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	4. a. Federal Identifier: 2010-65108-20582
2. DATE SUBMITTED: Applicant Identifier	b. Agency Routing Identifier

5. APPLICANT INFORMATION * Organizational DUNS: 790877419

* Legal Name: Florida State University

Department: Office of Research Division: Sponsored Research

* Street: 874 Traditions Way, Third Floor

Street2:

* City: Tallahassee County / Parish: Leon

* State: FL: Florida Province:

* Country: USA: UNITED STATES * ZIP / Postal Code: 323064-4166

Person to be contacted on matters involving this application

Prefix: Mr. * First Name: Greg Middle Name: W.

* Last Name: Thompson Suffix:

* Phone Number: 850-644-5260 Fax Number: 850-644-1464

Email: usdaaward@mailier.fsu.edu

6. * EMPLOYER IDENTIFICATION (EIN) or (TIN): 59-1961248

7. * TYPE OF APPLICANT: H: Public/State Controlled Institution of Higher Education

Other (Specify):

Small Business Organization Type Women Owned Socially and Economically Disadvantaged

8. * TYPE OF APPLICATION: If Revision, mark appropriate box(es).

New Resubmission A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration

Renewal Continuation Revision E. Other (specify):

* Is this application being submitted to other agencies? Yes No What other Agencies?

9. * NAME OF FEDERAL AGENCY: National Institute of Food and Agriculture	10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 10.310 TITLE: Agriculture and Food Research Initiative (AFRI)
--	---

USDA, National Institute of Food and Agriculture

NIFA/AFRI grant application—guts of the proposal

- **Project Summary/Abstract**

- The summary should include the relevance of the project to the goals of AFRI ELI. The following instructions are in addition to those included in section 4.7 of Part V of the NIFA Grants.gov
 - a) Names and institutions of the PD and Primary Mentor
 - b) Predoctoral or Postdoctoral application
 - c) Project type (education, extension, research, or integrated)
 - d) The primary and specific Foundational Program or Challenge area that the project addresses
- The Project Summary should be a short, concise description of the research, education, and/or extension project to be pursued in the applicant's proposed doctoral problem to be studied or postdoctoral training. **The summary should also include the relevance of the project to the goals of AFRI ELI Fellowships Grant Program.**
- **I suggest also stating the relevance to the goals of the primary and the specific program area and the relevance to US agriculture.**
- **Make all of this explicit!!!** Many people who are very busy need to read the Project Summary very quickly and route it appropriately. If it is not clear and easy to read, their enthusiasm will drop very quickly. Also, these Project Summaries go to Congress for assessment at Farm Bill renewal time.

USDA, National Institute of Food and Agriculture

NIFA/AFRI grant application—guts of the proposal

- Project Narrative

- 1) Response to previous reviews (if a resubmission)

- 2) Project Narrative

- a) **Training/Career Development Plan**

- b) **Mentoring Plan** (mentor will also submit a Letter of Commitment)

- c) **Project Plan**—for a Postdoctoral plan, should be ‘totally independent of the mentor’s’. **Explicitly** state how this is a new direction from the mentor’s work. Be aware, the RFA also states ‘Avoid open-ended screens or undefined outcomes’.

- Introduction: Background, goals, specific aims

- Rationale & Significance, in addition to stating the rationale & the significance, **explicitly restate the relevance of the project to the primary & specific program goals of the scientific program area & the relevance to US agriculture.**

- Approach—refer to instructions. Multiple ways to organize, but be sure to address: **What is the hypothesis? How will this approach address this hypothesis? What if it doesn’t work as planned? How will your results advance the field? Why will your results be significant? What are the Milestones, the Project Timeline and the plan for disseminating results?**

- d) **Evaluation Plan**—This is separate from the Milestones and Timeline within the Project Plan. This is Evaluation of the Training/Career Development Plan, the Mentoring Plan and the Project Plan.

USDA, National Institute of Food and Agriculture

It really helps the reviewers if you make your statements of relevance explicitly and clearly in the Narrative. If a reviewer finds your research plan exciting and wants to make a strong case for it to be funded, the statements on relevance will help them do that.

USDA, National Institute of Food and Agriculture

NIFA/AFRI grant application—Other documents

This can change!!! Carefully read the RFA for the year you apply!!!

- Bibliography and References Cited
- Facilities and Other Resources (ask your mentor for help with this and with 'Equipment'. He/she will have boilerplate for this.)
- Equipment
- Other attachments:
 - Key Personnel—roles and responsibilities of Project Director, collaborators, mentor, etc. (don't include Biographical Sketches here)
 - Mentor Letter, Reference Letters, and Documentation of Collaboration.
 - Primary Mentor Letter of Commitment
 - Collaborating Mentor Letters
 - Reference letters (3)—not primary or collaborating mentors
 - Academic standing—letter from thesis committee asserting status of applicant (PhD candidate or PhD awarded for postdoctoral)
 - Letters of support from collaborators (re services to be rendered)
 - Pre-prints in press, if applicable
- Key Personnel—This is where Biographical Sketches should be attached
- Current and pending support for both applicant and mentor
- Budget—standard grants.gov budget (ask your dept. Grants Specialist for help)—includes budget justification, any subcontractor information, etc.

USDA, National Institute of Food and Agriculture

Review criteria and the **Reviewer's perspective**:

- USDA reviewer guidelines ask the primary reviewer to state at the beginning of the review:
 - 1) A short summary of the project derived from the Project Narrative (1-2 sentences). Help the reviewer out and give them a **very short** summary at the very beginning.
 - 2) The 'Central Hypothesis' of the research plan
I have found this really useful and now organize each of my Specific Aims by **explicitly** stating the hypothesis to be addressed and exactly how that Aim will address that hypothesis.
- By the time a reviewer is on the 15th proposal and it is the night that the reviews have to be uploaded, he/she really needs to be fed the most important information in bite-sized pieces.
- The substance has to be there along with the sound bites, but **do not make the reviewer dig for the main points!!!**

USDA, National Institute of Food and Agriculture

Other NIFA/AFRI review criteria for **standard applications**:

1) Scientific Merit of the Application for Research

- a) Novelty, innovation, uniqueness, and originality;
- b) Where model systems are used, ability to transfer knowledge gained from these systems to organisms of importance to U.S. agriculture;
- c) Conceptual adequacy of the research and suitability of the hypothesis, as applicable;
- d) Clarity and delineation of objectives;
- e) Adequacy of the description of the undertaking and suitability and feasibility of methodology;
- f) Demonstration of feasibility through preliminary data; and
- g) Probability of success of the project is appropriate given the level of scientific originality, and risk-reward balance.

2) Qualifications of Project Personnel, Adequacy of Facilities, & Project Management

- a) Qualifications of applicant (individual or team) to conduct the proposed project, including performance record and potential for future accomplishments;
- b) Demonstrated awareness of previous and alternative approaches to the problem identified in the application;
- c) Institutional experience and competence in subject area;
- d) Adequacy of available or obtainable support personnel, facilities, and instrumentation; and
- e) Planning and administration of the proposed project, including: time allocated for systematic attainment of objectives; and planned administration of the proposed project and its maintenance, partnerships, collaborative efforts, and the planned dissemination of information for multi-institutional projects over the duration of the project.

3) Project Relevance--Documentation that the research is directed toward specific program area priority(ies) identified for the program in this RFA. These priorities are designed to yield improvements in & sustainability of U.S. agriculture, the environment, human health & well-being, and rural communities.

USDA, National Institute of Food and Agriculture

Other NIFA/AFRI review criteria for **AFRI ELI applications**:

1) Scientific Merit of the Application for Research

- a) Novelty, multidisciplinary innovation, uniqueness, originality, and advancing current knowledge;
- b) Conceptual adequacy of the research, education, and/or extension, as applicable;
- c) Project objectives and outcomes are clearly described and measurable, adequate, and appropriate;
- d) Proposed approach, procedures, or methodologies are appropriate, clearly described, suitable, and feasible;
- e) The predoctoral or postdoctoral fellow has documented achievement of high educational quality and excellence (e.g., GRE score, GPA, list of scholarly activities, honors, professional society membership, etc.);
- f) Appropriate educational opportunities and curriculum plan for proposed area of study.
- g) Novelty and innovation in the training and career development plans supports the career trajectory of the Fellows and provides sufficient time to obtain teaching credentials or competencies in preparation for entering the professional workforce.

2) Qualifications of Project Personnel, Adequacy of Facilities, & Project Management

- a) Roles of the Fellow(s), mentor(s), and other key personnel are clearly defined;
- b) Assessment of predoctoral or postdoctoral applicants': critical thinking and analytical skills based on organization and details provided in the application; ability to develop into a leader in the food and agricultural sciences; level of maturity of thought, alignment between career goals and objectives and appropriate activities and opportunities presented to achieve those goals; documented achievement of high educational quality and excellence (e.g., GPA, GRE, publications, presentations, awards); appropriate educational opportunities, mentoring, and curriculum plan for proposed area of study;
- c) Fellow(s), along with mentor(s) and other key personnel, have sufficient preparation/expertise to ensure successful completion of the proposed project, and where appropriate, partnerships with other relevant disciplines and institutions are established;
- d) Evidence provided that the proposed work is original and developed by the applicant in consultation with other key personnel;
- e) Evidence that the identified institution has capacity and competence in the proposed area of work and support personnel, facilities, and instrumentation are sufficient;
- f) A clear plan is articulated for project management, including time allocated for attainment of objectives, responsibilities for deliverables, and delivery of products;
- g) Appropriate mentor engagement and training in research, education, and/or extension is described.

USDA, National Institute of Food and Agriculture

Other NIFA/AFRI review criteria for AFRI ELI applications, continued:

3) Project Relevance

- a) Documentation that the proposed research, education, and/or extension activity is directed toward specific Program Area Priorities identified in this RFA.
- b) Plan and methods for evaluating success of project activities and documenting potential impact against measurable short and mid-term outcomes are suitable and feasible;
- c) Science-based knowledge, skills, and capabilities gained are related to the NIFA foundational programs and challenge areas and will enhance and sustain human capital beyond the life of the project; and
- d) Potential of the proposed project and training in serving as a good foundation for the applicant predoctoral or postdoctoral fellow to complete PhD degrees or provide the requisite, individualized and mentored experiences that will develop his/her research skills that help them become independent and productive scientists.

**They are not kidding about the review criteria.
Do not blow it off.
Address each point.**

USDA, National Institute of Food and Agriculture

Other tips:

- **Don't go TOO broad in your Introduction.**
 - It should be a focused review for your research problem, not a review of your entire field.
 - Continually ask yourself if a piece of background information is necessary for the reviewer to understand the significance, the goals and the approach.
- **Do not underestimate the importance of considering potential pitfalls and alternative approaches.**
 - If you don't address at least a few of these, your proposal will probably not be funded.
 - It is very easy at this stage to assume that because your mentor thinks it will work, it will work. Not necessarily....
 - Tell them about the pitfalls that are obvious—they may be obvious to a reviewer in your field.
 - What are potential solutions and how will results from other Aims allow you to get around this Aim if it doesn't work?
 - Tell them about the non-obvious pitfalls for which you have a really clever solution.
 - This has a huge impact on the reviewer and their perception of your research sophistication.