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

• 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 in FY2018--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
  • Bioenergy, natural resources, and environment
  • Agriculture systems and technology
  • Agriculture economics and rural communities

• AFRI Challenge Areas (these will eventually change in Farm Bill renewals):
  • Resilient Agroecosystems in a Changing Climate
  • Childhood Obesity Prevention
  • Food Safety
  • Food Security
  • Sustainable Bioenergy
  • Water for Food Production Systems
USDA, National Institute of Food and Agriculture
Agriculture and Food Research Initiative Foundational Programs

• Funding lines vary greatly across programs and sub-programs. They also vary from year-to-year.
  • It usually depends on how much time has passed between RFAs
    • Since USDA NIFA is completely Farm Bill-dependent, in some years RFA comes out exactly 1 year later than previous. In years with a Farm Bill delay, can be 15-17 months between RFAs
• Postdoctoral fellowships
  • In 2016, 44/132 = 33%
• Predoctoral fellowships
  • In 2016, 53/124 applications funded = 43%
• These rates are substantially improved from 2014.
USDA, National Institute of Food and Agriculture

Pre-doctoral and Postdoctoral Fellowships Programs, ‘Agriculture and Food Research Initiative - Education and Workforce Development (EWD)’

Websites:

- Link to abstracts of funded proposals is on this site:
- **Deadline** for 2018 Predoctoral and Postdoctoral Fellowships was July 19, 2018—they have not yet released the new RFA. Expect new RFA in April (maybe later because of shutdown)

- **Program Goal**—Prepare the next generation of scientists through fellowships for doctoral candidates & post-doctoral scholars

- **2018 Funding Opportunity Number:** USDA-NIFA-AFRI-006555 there will be a new # for 2019
USDA, National Institute of Food and Agriculture

- Fellowship applications must be in AFRI Priority Areas
- Unfortunately, must be US citizen or permanent resident (Green card holder)
- Predoctoral Fellowships (program code A7101)
  - $120,000 total
  - 2 years
  - $35,000 stipend per year
  - $22,000 tuition, travel, etc. per year
- Postdoctoral Fellowships (program code A7201)
  - $165,000 total
  - 2 years
  - Funds primarily for salary
  - Up to $30,000 allowed for other expenditures
  - Deadline for applying is usually set as <4 yrs after completing PhD
  - Resubmission allowed
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)
What follows is a description of requirements from past Postdoctoral RFAs.
With the new Farm Bill, the new RFA instructions may change.
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 EWD. With every new RFA, there may be changes, but this is what has been included in the past. Be sure you have the full application package, not just the RFA description pdf.
    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 Farm Bill Focus area that the project addresses
  - **Relevance to the goals of the primary and the specific program area and the relevance to US agriculture.**
  - **Relevance of the project to the goals of AFRI EWD Fellowships Grant Program**
    - 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.
  - **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.
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)
    - 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)
- Logic Model
- Management Plan
- Data Management Plan
- Documentation of Collaboration
- Pre-prints in press, if applicable
- Felony Convictions or Tax Delinquency
- Expanded Key Personnel—For postdoctoral applications—only the PD
- Current and pending support
- Budget—standard grants.gov budget (ask your dept. Grants Specialist for help)—includes budget justification, any subcontractor information, etc.
- Supplemental Info
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 15\textsuperscript{th} 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!!!**
Other NIFA/AFRI review criteria for AFRI EWD applications:

1) Merit of the Application for Research
2) Qualifications of Project Personnel, Adequacy of Facilities, & Project Management
3) Project Relevance

I’ve included the full pdf document on specific criteria in the package

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