Funding opportunities at the USDA National Institute of Food and Agriculture, and the Competitive Grant Application and Review Process

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Who we are and what we do:

- provide leadership and funding for programs that advance agriculture-related sciences
  - Advance competitiveness of U.S. agriculture
  - Enhance safety of nation’s food supply
NIFA’s FY 2019 Budget (million $)

- Research and Education Activities: 937.6 million
- Integrated Activities: 216.3 million
- Extension Activities: 505.7 million
- Mandatory and Endowment Funding: 38.0 million

Total = $1,702.6 million
About the National Institute of Food and Agriculture (NIFA)

• Nation’s primary agency for extramural funding in Food and Agricultural Sciences
• >30 competitive grant programs totaling >$800 million/year
  – Research, Education, or Extension
  – Integrated Research, Education, and/or Extension
Competitive Grant Funding

>30 Competitive Grant Programs with broad eligibility

- Agriculture and Food Research Initiative (AFRI)
- Specialty Crop Research Initiative (SCRI)
- Organic Agriculture Research and Extension Initiative (OREI)
- Beginning Farmer and Rancher Development Program (BFRDP)
- Biotechnology Risk Assessment Research Grants Program (BRAG)
Suitability of NIFA Programs for UMd ENST Faculty

- Probably a program to cover most if not all areas
- USDA’s flagship competitive grant program
  - Agriculture and Food Research Initiative (AFRI)
  - $425 million in fiscal year 2020
  - Organized into 3 Requests for Applications (RFA) addressing 6 broad funding priorities
Suitability of NIFA Programs for UMd CANR Faculty

• Funding Priorities for AFRI
  – 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
Organization of AFRI

Three Requests for Applications (RFA)

1. Foundational and Applied Science
2. Education and Workforce Development
3. Sustainable Agricultural Systems
AFRI Foundational & Applied Science RFA: Program Areas aligned with Farm Bill Priorities

- Plant health and production, and plant products
- Animal health and production, and animal products
- Food safety, nutrition, and health
- Bioenergy, natural resources, and the environment
- Agriculture systems and technology
- Agriculture economics and rural communities
- Crosscutting programs
Foundational and Applied Science RFA: Cross-cutting Program Areas Priorities

- Tactical Sciences for Agricultural Biosecurity
- Inter-Disciplinary Engagement in Animal Systems (IDEAS)
- Agricultural Microbiomes
- Data Science for Food and Agricultural Systems (DSFAS)
- Critical Agricultural Research and Extension (CARE)
Education and Workforce Development

- Postdoctoral Fellowships – individual applies
- Predoctoral Fellowships – individual applies
- Research and Extension Experiences for Undergraduates (REEU) – institution applies for a group of fellowships
- Professional Development for Agricultural Literacy – training and continued education of K-14 ag teachers
- Agricultural Workforce Training Grants – workforce training at community, junior, and technical colleges
Sustainable Agricultural Systems

• Started in 2018

• Progression of the Challenge Areas to new multidisciplinary systems-level work

• Up to $10 million per systems-level Coordinated Agricultural Project (CAP) grant
AFRI Grant Types

- Standard Grants
- Coordinated Agricultural Projects (CAP)
- Conference Grants
- FASE Grants
  - Pre- and Postdoctoral Fellowship Grants
  - Strengthening Grants – several types
  - New Investigator Grants
FASE Grants

• Goal
  – Help institutions develop competitive projects
  – Attract new scientists and educators into careers in high-priority areas of national need in agriculture and food sciences
FASE Grants

• Types
  – Pre- and Postdoctoral Fellowships
  – Strengthening
    - Strengthening Standard Grants
    - Strengthening CAP Grants
    - Strengthening Conference Grants
    - Strengthening Seed, Sabbatical and Equipment Grants
  – New Investigators
    - “New Investigator” Standard Grants
    - “New Investigator” Seed Grants – new in 2021
FASE Grants

- Project Director (PD) Eligibility
  - Pre- and Postdoctoral Fellowships –
    - Citizens, Nationals, Permanent Residents
    - progress toward or completion of degree (see RFA)
FASE Grants

• Project Director (PD) Eligibility
  - New Investigators
    - First 5 years of first career-track position
    - Limited publication record
    - No previous Federal funding other than a pre- or postdoctoral fellowship or AFRI seed grant
Grant Application Submission and Review Process
Grant Application Process

• RFAs posted to NIFA website
• RFAs, Application Kit, and Instructions posted to www.grants.gov
  – Each application kit is specific to that RFA only (specific Funding Opportunity Number)
• All applications must be submitted electronically through www.grants.gov
Applying for Grants

- Download RFA from NIFA website and obtain the Funding Opportunity Number (FON)
  USDA-NIFA-AFRI-006772
- Download application package and instructions from www.grants.gov using **correct FON**
  - Each application kit is specific to that RFA only (specific Funding Opportunity Number)
- Submit electronically through grants.gov
Application Submission Deadlines

• >30 competitive grant programs with deadlines throughout the year

• One deadline per year per program

• NIFA adheres strictly to deadlines published in each Request for Applications (RFA)
  – Submit well ahead of the published deadline
Review Process

- Peer reviewed by panel of experts in research, education and extension, as applicable
- Minimum of 3 reviewers per proposal, plus program-dependent use (or non-use) of ad hoc reviewers
- Peer review process is published on NIFA website – just google “NIFA review process”
Funding Success Rates

• NIFA adheres closely to panel rankings when making award recommendations

• Funding success rates vary markedly by program
  – range from 10 to 40%
  – most commonly 15 to 20%
Resources on the NIFA Website

• “NIFA Peer Review Process for Competitive Grant Applications” (https://nifa.usda.gov/resource/nifa-peer-review-process-competitive-grant-applications)
  – also includes “General Grant Writing Tips for Success”


What To Do If You Have Questions?

Contact the Program Staff !!!
Grant Writing Tips for Success

“Ten Things You Must Do”
Ten Things You Must Do

1. Find the right program for you and your idea

- Main purpose of program (funding priorities) – does idea fit in mainstream or on the fringe?
- Don’t waste time applying to the wrong program... square pegs don’t fit in round holes!
- Eligibility restrictions?
Ten Things You Must Do

2. Become a “student” of the RFA

- Understand the main goals of the program
- Understand the instructions outlined in the RFA on how to assemble the proposal
- Read the RFA !!!
Ten Things You Must Do

3. Develop a timeline for proposal preparation
   - Develop timeline that allows for completion of proposal 4 weeks before submission deadline
   - If you rush preparation of the proposal, it will show – reviewers will notice and not be kind
Ten Things You Must Do

4. Understand criteria for evaluating proposals

- RFA normally contains the criteria that will be used by reviewers to evaluate your proposal
- Understand these criteria BEFORE you begin preparing your proposal - provides better understanding of where to put greatest efforts during proposal preparation
Ten Things You Must Do

5. Understand review process and reviewers

- Reviewer may be assigned 10 to 20 proposals
- Following directions in RFA helps reviewers; not following directions makes them work hard
- Preparing proposal logically and clearly helps reviewers; not doing so makes them work hard
Ten Things You Must Do

6. Write the proposal logically and clearly
   - Organize proposal according to outline in RFA or evaluation criteria, whichever is most logical
   - Following the prescribed format makes reviewers happy and more generous
   - Making reviewers work hard hurts you
Ten Things You Must Do

7. Prepare budget with a strong justification

♦ Unreasonable budgets hurt proposals – create skeptics within reviewer ranks (credibility)

♦ Keep budgets within guidelines in the RFA – they are judged on degree of reasonableness
Ten Things You Must Do

8. Obtain critical input from experienced and successful colleagues. Someone who....

- Talks frankly, bluntly and clearly – don’t want someone who beats around the bush
- Has little sympathy for your ego
- Has been successful in obtaining grants
Ten Things You Must Do

9. Fill out forms completely and correctly

10. Allow time for intramural administrative requirements – submit on time

🔹 A deadline is a deadline is a deadline!
One Final Thought

A proposal is not a mystery novel !!!

Get to the point....

quickly, clearly, concisely, logically
One Final Thought

A proposal is not a mystery novel !!!

First sentence of the proposal should state what the problem is and why it is important
Miscellaneous Tips

Learn about the review process – best way is by experience (i.e., serving on panels)

- Review RFAs to identify programs for which you have expertise – think broadly about your expertise
- Contact the Program Leader to volunteer – provide a very brief description of your expertise and CV
- Repeat annually, as needed
What to Do if You Have Questions?

Contact the Program Staff!!!