

# **Specialty Crop Research Initiative**

---

***FY 2010 Request for Applications***

**APPLICATION DEADLINE: January 14, 2010**



**U.S. Department of Agriculture  
National Institute of Food and Agriculture**

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE;  
U.S. DEPARTMENT OF AGRICULTURE**

**SPECIALTY CROP RESEARCH INITIATIVE**

**CATALOG OF FEDERAL DOMESTIC ASSISTANCE:** This program is listed in the Catalog of Federal Domestic Assistance under 10.309, Specialty Crop Research Initiative.

**DATES:** Complete, error-free applications must be received in Grants.gov by **January 14, 2010 (5:00 p.m. or earlier Eastern Time)**. Applications received after this deadline will normally not be considered for funding. The agency strongly encourages applicants to submit applications well before the deadline to allow time for correction of technical errors identified by Grants.gov. Comments regarding this request for applications (RFA) are requested within six months from the issuance of this notice. Comments received after that date will be considered to the extent practicable.

**STAKEHOLDER INPUT:** The National Institute of Food and Agriculture is requesting comments regarding this RFA from any interested party. These comments will be considered in the development of the next RFA for the program, if applicable, and will be used to meet the requirements of section 103(c)(2) of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7613(c)(2)). This section requires the Secretary to solicit and consider input on a current RFA from persons who conduct or use agricultural research, education, and extension for use in formulating future RFAs for competitive programs. Written stakeholder comments on this RFA should be submitted in accordance with the deadline set forth in the DATES portion of this Notice.

Written stakeholder comments should be submitted by mail to: Policy and Oversight Branch; Office of Extramural Programs; National Institute of Food and Agriculture; USDA; STOP 2299; 1400 Independence Avenue, SW; Washington, DC 20250-2299; or via e-mail to: [RFP-OEP@nifa.usda.gov](mailto:RFP-OEP@nifa.usda.gov) (this e-mail address is intended only for receiving comments regarding this RFA and not requesting information or forms). In your comments, please state that you are responding to the Specialty Crop Research Initiative RFA.

\*\*\*\*\*Please Read\*\*\*\*\*

## **Important Information Regarding Specialty Crop Research Initiative Policies and Procedures**

\*\*\*\*\*Please Read\*\*\*\*\*

**All applications to the Specialty Crop Research Initiative must be submitted through Grants.gov. Only materials submitted through Grants.gov (including letters of support) will be considered in the review process.**

**Notice of Intent to Submit an Application:** Prospective applicants are asked to email a notification of intent to submit an application by close of business on November 25, 2009 (5:00 p.m. Eastern Time). The notification of intent to submit is not required and does not enter into the review of a subsequent application. The information it contains will be used to help program staff plan the review and estimate the potential review workload. This email should include the following information:

- Descriptive (draft) title of proposed research;
- Name of the Project Director and applicant name if applicable;
- Names of other potential co-Project Directors and their affiliations, if applicable;
- Focus area(s) addressed (see Part I(B) for specific details);
- Likely type of proposal (Coordinated Agricultural Project, Standard Research and Extension Project, Regional Partnerships for Innovation Project, eXtension Project, and Research and Extension Planning Project); and
- **Subject line of email should read: SCRI – Intent to Submit.**

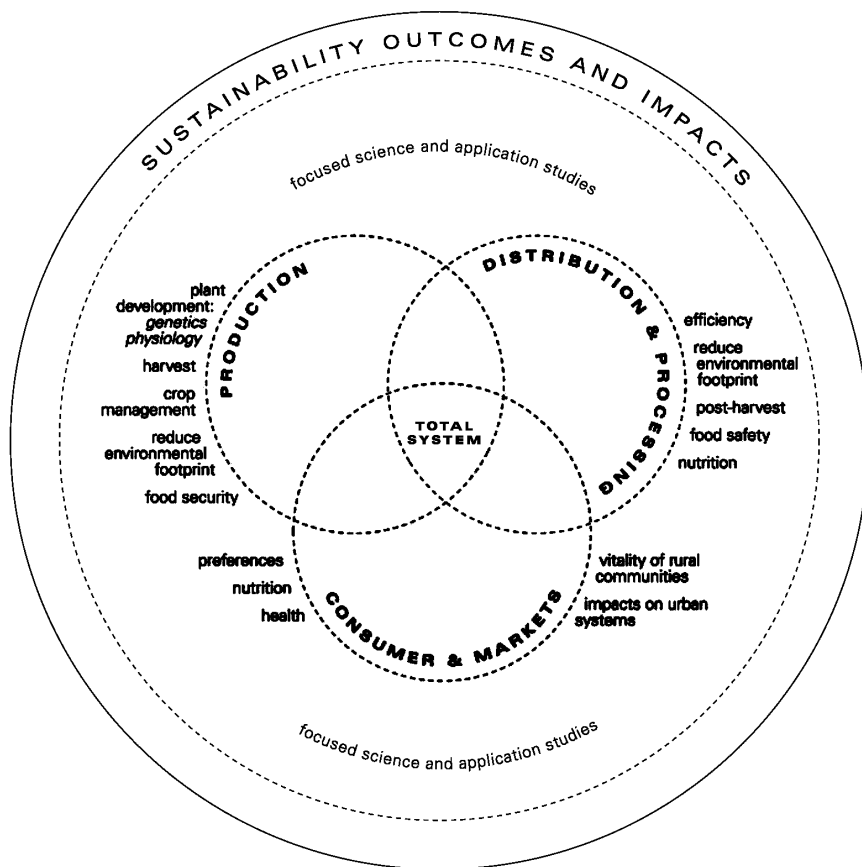
Emails should be sent to [scri@nifa.usda.gov](mailto:scri@nifa.usda.gov).

**Implementation of the Specialty Crop Research Initiative:** It is strongly encouraged that applicants propose a unique approach to solving problems facing the specialty crop industries by addressing challenges using a systems approach, as defined in Part VIII (E). That is:

A systems approach is any process of estimating or inferring how local policies, actions, or changes influence the state of the neighboring universe. It is a framework that is based on the belief that the component parts of a system can best be understood in the context of relationships with each other and with other systems, rather than in isolation. The only way to fully understand why a problem or element occurs and persists is to understand the part in relation to the whole.

The philosophy of the SCRI is that truly effective, long-term solutions to specialty crop industry problems can best be achieved by understanding and treating those problems as complex systems of many interacting components. This perspective requires projects that are larger in scope and complexity, and that demand more resources than have traditionally been allocated to individual research and extension projects.

In doing so, applications should focus on entire primary systems, or on areas where two or more primary systems overlap. For the purposes of this announcement, a primary system is one of the three main sectors of the specialty crop industry depicted in the graphic below: the production system, the processing and distribution system, and the consumer and marketing system. Meeting the challenges faced by these industries can best be handled by considering the full breadth of system components (see example components listed for each primary system), rather than treating each component in isolation and ignoring important interactions and conflicts among components that may render component-specific solutions unviable in the longer term.



Specialty crops are defined in law as fruits and vegetables, tree nuts, dried fruits, and horticulture and nursery crops, including floriculture. Furthermore, USDA has developed a more detailed description of “specialty crops” that is now in use by all USDA agencies. Please see the “More Information link, <http://www.nifa.usda.gov/funding/scri/scri.html>, for more guidance on those crops designated as “specialty crops” by USDA. In total, these crops face many unique, but common, challenges. The SCRI seeks to address these challenges by funding systems-based, trans-disciplinary approaches. **PLEASE NOTE: For purposes of the SCRI, the term trans-disciplinary, is defined as a multi-discipline approach that brings biological and physical scientists together with economists and social scientists to address challenges in a holistic manner.** It is anticipated that successful applications will:

1. Engage stakeholders in collaborative ways to identify those priorities of greatest need;
2. Bring together multi-state, multi-institutional teams of biological, physical and social scientists to develop strategies and actions emphasizing **systems-based, trans-disciplinary** approaches for meeting the identified priorities;
3. Address priorities through research and extension;
4. Present plans for documenting the impacts of funded applications that include stakeholder involvement; and
5. Include explicit mechanisms to communicate results to producers and the public.

**Support of Long-term, Systems-focused Research and Extension:** In fiscal year 2010, the SCRI will begin supporting long-term, systems-focused research and extension projects in areas where current project periods do not allow for the completion of project objectives. Breeding of woody plants and some ecological studies are examples of these types of projects. In order to be considered as a long-term project, applicants **MUST** request five years of funding and state in the **Project Summary** that the applicant wishes to be considered as a long-term project. Only Standard Research and Extension Projects (SREPs) and Coordinated Agricultural Projects (CAPs) may be considered as long-term projects. In the final year of the original project period applicants will be able to apply for an additional 5-year increment of funding as a renewal application, subject to authorization and the availability of funds. Renewal applications request additional funding for a project beyond the period that was approved in an original or amended award. Applications for renewed funding must contain the same information as required for new applications, and additionally must contain a progress report which demonstrates measurable progress. Renewal applications will be evaluated in competition with other pending applications in the appropriate area to which they are assigned, and will be reviewed according to the same evaluation criteria as new applications.

**New Recipients of NIFA Funding:** The eligibility requirements for the SCRI are quite broad (see Part III (A)). Successful applicants who have not received CSREES funding in the past will be required to provide detailed management information prior to the receiving an award. Specific management information is required as part of the responsibility determination prior to the award of a grant, and must be provided as part of the pre-award process (see Part V (D) for more information).

**Project Director (PD) Workshop:** It is the intent of the SCRI to require successful applicants, or a designee, to attend at least one PD workshop during the term of their project. These workshops may be held in conjunction with another conference or may be held separate from any other meeting. **For the purpose of budget development, applicants are required to request funds for attending at least one such workshop. The request for these funds should be clearly indicated in the budget narrative section of the application.**

**Matching Requirement: 100 percent non-federal match is legislatively required for this funding opportunity. ALL applicants will be required to provide appropriate matching documentation in each application (see Part IV (B) (6) of this RFA for more specific information).**

**Registration Requirement:** Before applying, you must complete the Grants.gov registration process, which **can take as long as two weeks**. Please see Part IV (A) and the following Grants.Gov link for more information: [http://www.grants.gov/applicants/get\\_registered.jsp](http://www.grants.gov/applicants/get_registered.jsp).

**EXECUTIVE SUMMARY:** The National Institute of Food and Agriculture requests applications for the Specialty Crop Research Initiative (SCRI) for fiscal year (FY) 2010 to solve critical United States specialty crop issues, priorities, or problems through the integration of research and extension activities that take systems-based, trans-disciplinary approaches. The intent of the SCRI is to solve the needs of the various specialty crop industries through the promotion of collaboration, open communication, the exchange of information and the development of resources that accelerate application of scientific discovery and technology. NIFA anticipates the total amount available for support of the FY 2010 SCRI will be approximately \$47.3 million. SCRI will give priority to projects that are multistate, multi-institutional, or trans-disciplinary, [see Definitions, Part VIII (E)]; and include explicit mechanisms to communicate results to producers and the public.

The SCRI offers the following five project types in FY 2010. These project types are described in more detail in Part II(C). **Applicants should decide which project type is best suited to the objectives of their research and extension project and develop a budget that fits the objectives.**

1. **Standard Research and Extension Projects (SREPs)**
  - a. Project Period – Up to five years.
  - b. Budget – Not less than \$250,000 per project.
  - c. Purpose – To support targeted problem-solving efforts that would not otherwise qualify in scope for support as a CAP project.
2. **Coordinated Agricultural Projects (CAPs)**
  - a. Project Period – Three to five years.
  - b. Funding range – Normally, federal funds will not exceed \$2,000,000 per **year**.
  - c. Purpose – To address specific multiple components of a primary system or multiple components of areas where primary systems overlap (see diagram on page 4).
3. **Regional Partnerships for Innovation (RPIs)**
  - a. Project Period – Two to three years.
  - b. Budget – Normally, federal funds will not exceed \$2,000,000 per project.
  - c. Purpose – To form partnerships that provide the local or regional infrastructure needed to fully exploit future technology commercialization and adoption.
4. **eXtension Projects**
  - a. Project Period – Three to five years.
  - b. Budget – Normally, federal funds will not exceed \$500,000 per project.
  - c. Purpose – To develop Communities of Practice (COPs) for the eXtension system and to support existing COPs.

## 5. Research and Extension Planning Projects

- a. Project Period – One year.
- b. Budget – Federal funds up to \$50,000 per project.
- c. Purpose – To provide assistance to applicants in the development of quality proposals.

This notice identifies the objectives for SCRI projects, the eligibility criteria for projects and applicants, and the application forms and associated instructions needed to apply for a SCRI grant.

In fiscal year 2010, the SCRI will begin supporting long-term, systems-focused research and extension projects in areas where current project periods do not allow for the completion of project objectives. Breeding of woody plants and some ecological studies are examples of these types of projects. In order to be considered as a long-term project, applicants **MUST** request five years of funding and state in the **Project Summary** that the applicant wishes to be considered as a long-term project. Only SREPs and CAPs may be considered as long-term projects. Renewal applications request additional funding for a project beyond the period that was approved in an original or amended award, subject to authorization and the availability of funds. Applications for renewed funding must contain the same information as required for new applications, and additionally must contain a progress report which demonstrates measurable progress. Renewal applications will be evaluated in competition with other pending applications in the appropriate area to which they are assigned, and will be reviewed according to the same evaluation criteria as new applications. **For FY 2010, renewal grant applications will not be considered for funding.**

## Table of Contents

<b>PART I—FUNDING OPPORTUNITY DESCRIPTION</b> .....	9
A. Legislative Authority and Background .....	9
B. Purpose and Priorities .....	9
<b>PART II—AWARD INFORMATION</b> .....	14
A. Available Funding .....	14
B. Types of Applications .....	14
C. Project Types .....	14
<b>PART III—ELIGIBILITY INFORMATION</b> .....	20
A. Eligible Applicants .....	20
B. Cost Sharing or Matching .....	20
<b>PART IV—APPLICATION AND SUBMISSION INFORMATION</b> .....	21
A. Electronic Application Package.....	21
B. Content and Form of Application Submission.....	22
C. Submission Dates and Times .....	27
D. Funding Restrictions .....	28
E. Other Submission Requirements.....	28
<b>PART V—APPLICATION REVIEW REQUIREMENTS</b> .....	29
A. General.....	29
B. Evaluation Criteria .....	29
C. Conflicts of Interest and Confidentiality.....	35
D. Organizational Management Information.....	35
<b>PART VI—AWARD ADMINISTRATION</b> .....	36
A. General.....	36
B. Award Notice .....	36
C. Administrative and National Policy Requirements.....	37
D. Expected Program Outputs and Reporting Requirements .....	38
<b>PART VII—AGENCY CONTACT</b> .....	39
<b>PART VIII—OTHER INFORMATION</b> .....	40
A. Access to Review Information.....	40
B. Use of Funds; Changes .....	40
C. Confidential Aspects of Applications and Awards .....	41
D. Regulatory Information .....	41
E. Definitions.....	41
F. Electronic Application Checklist.....	47

## **PART I—FUNDING OPPORTUNITY DESCRIPTION**

### **A. Legislative Authority and Background**

The Specialty Crop Research Initiative (SCRI) is authorized by Section 7311 of the Food, Conservation, and Energy Act of 2008, which added section 412 to the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA). Section 412 of AREERA establishes a specialty crop research and extension initiative to address the critical needs of the specialty crop industry by developing and disseminating science-based tools to address needs of specific crops and their regions.

Please note that 7 CFR 3430.63 applies to this program as awards are supported with annual appropriations. Hence, any funding awarded in FY 2010 expires by the period end date of the award or September 30, 2015, whichever is earlier.

### **B. Purpose and Priorities**

The purpose of the SCRI is to address the critical needs of the specialty crop industry (as defined in Part VIII (E)). SCRI projects must be designed to solve critical specialty crop agriculture issues, address priorities, and/or solve problems through multifunctional research and extension activities. **Except for eXtension Project applications and Research and Extension Planning Project applications, the SCRI only accepts applications that integrate research *and* extension activities.**

The SCRI will give priority to projects that are multistate, multi-institutional or trans-disciplinary, and include explicit mechanisms to communicate results to producers and the public. Projects must budget sufficient resources to carry out the proposed set of extension and research activities. Projects **must address** at least one of the five legislatively mandated focus areas described below and applications should describe the practical applications being sought. The intent of the SCRI is to promote collaboration, open communication, the exchange of information and the development of resources that accelerate application of scientific discovery and technology to solving needs of the various specialty crop industries. SCRI aims to reduce duplication of efforts and integrate activities among individuals, institutions, states, and regions. Therefore, applications should clearly articulate how an SCRI award will complement and/or link with existing programs or projects. FY 2010 funds will be awarded to successful applicants under the five project types described in detail in Part II(C).

1. The SCRI has five legislatively mandated focus areas, each of which will receive at least 10 percent of the available funds. These focus areas are: Research in plant breeding, genetics, and genomics to improve crop characteristics, such as:
  - a. product, taste, quality, and appearance;
  - b. environmental responses and tolerances;
  - c. nutrient management, including plant nutrient uptake efficiency;
  - d. pest and disease management, including resistance to pests and diseases resulting in reduced application management strategies; and
  - e. enhanced phytonutrient content.
2. Efforts to identify and address threats from pests and diseases, including threats to specialty crop pollinators;
3. Efforts to improve production efficiency, productivity, and profitability over the long term (including specialty crop policy and marketing);
4. New innovations and technology, including improved mechanization and technologies that delay or inhibit ripening; and
5. Methods to prevent, detect, monitor, control, and respond to potential food safety hazards in the production and processing of specialty crops, including fresh produce.

NIFA will address all of these focus areas by funding projects that emphasize **systems-based, trans-disciplinary** approaches. In addition, for the purposes of this program, NIFA interprets new innovations and technology to include, among other things, automation, robotics, sensor technology and precision agriculture for specialty crops. NIFA also recognizes the importance of specialty crops in enhancing human nutrition and health.

The Specialty Crop Research Initiative strongly encourages applicants to develop partnerships that include collaboration with: (1) small- or mid-sized, accredited colleges and universities; and/or (2) 1890 land-grant institutions, 1994 land-grant institutions, Hispanic-serving institutions, and/or other institutions that serve high-risk, under-served, or hard-to-reach audiences or international partnerships, linkages, and exchanges that contribute to solving critical specialty crop issues, priorities, or problems in the U.S.

**Please note: This program does not fund start up businesses. Please see the Small Business Innovation Research Program website for business opportunities**  
<http://www.csrees.usda.gov/fo/sbir.cfm>.

### **FY 2010 Priority Topics**

Stakeholder organizations have spent considerable effort crafting strategic plans and technology roadmaps over the past several years. Stakeholders have also provided direct input to the SCRI Program Directors. While stakeholder communities have expressed broad interest in research and extension projects that cover many different topics within the five (5) mandated focus areas, they have also indicated some very significant high-priority needs. Consequently, based on those stated industry needs, the SCRI has identified a number of priorities within each focus area for FY 2010, and particularly encourages applications that address these priorities. Identification of these priorities is not intended to be exclusionary and should not deter submission of applications that address other priorities appropriate to each focus area.

1. Research in plant breeding, genetics, and genomics to improve crop characteristics:
  - Develop innovative plant breeding systems that improve flexibility and speed for delivering unique new specialty crop cultivars adapted to meet future challenges.
  - Describe and develop systems to remove non-technical barriers to adoption of new cultivars— such as economic or marketing barriers—that inhibit full exploitation of the genetic potential of specialty crops.
  - Preserve and utilize national grape germplasm stocks to develop and expand commercial accessions that meet regional industry cost and quality requirements, and eliminate production hurdles relating to pests/diseases and environmental stress.
  - Facilitate and improve connections between genomic projects and specialty crop breeding programs, including phenotypic characterization, marker development, transgenic research and risk assessment, and cloning of key genes of economic importance for vegetable crops.
  - Advance understanding of the genomics of the Compositae or Rutaceae family and their application to practical breeding programs.
  - Develop new cultivars that are co-designed with newly engineered systems for production operations (e.g., spraying, pruning, scouting, and harvesting), to help assure that future crop architectures are amenable to increased mechanization.
  - Utilize genetic approaches to enhance the nutritional value of specialty crops.
  
2. Efforts to identify and address threats from pests and diseases, including threats to specialty crop pollinators:
  - Create new scientific developments, technologies, and tools that will help reduce the incidence and impact of industry-critical insect and disease problems including, but not limited to: monitoring, control and management strategies (e.g., Citrus Greening, also known as Huanglongbing, and the Asian citrus psyllid, which vectors the disease); field based diagnostic tools; integrated management systems; and comprehensive strategies and mechanisms for eradication of newly introduced pests where eradication is a plausible strategy.
  - Create new knowledge and improved tools to understand, protect, and manage native pollinators, including: determining the role and extent of parasites and pathogens on native pollinators; modifying specialty crop production systems to improve habitat for pollinators; and establishing and valuating ecosystems services performed by native pollinators in specialty crop systems.
  - Develop new integrated pest management tools, such as have been demonstrated with the integrated pest management - Pest Information Platforms for Extension and Education (ipmPIPE) and other wide-area, integrated systems, that possess the potential for broad impact. Proposed projects should respond to stakeholder identified critical threats.
  
3. Efforts to improve production efficiency, productivity, and profitability over the long term (including specialty crop policy and marketing):

- Develop new or improved mechanisms (e.g., criteria and indicators) for assessing sustainability that will allow specialty crop producers and processors, or entire industries or regions, to evaluate the sustainability of current practices and to monitor their movement toward more sustainable practices over time.
  - Improve the understanding and application of knowledge about the nutritional and health properties of bioactive compounds in specialty crops.
  - Improve understanding and application of nutrition, economic, social science, and marketing factors influencing the consumption of specialty crops: increase knowledge about health promoting properties of bioactive components found in specialty crops; develop and evaluate the impact of strategies to improve knowledge, attitudes, beliefs, and behaviors related to consumption; test or develop new methods to measure the outcomes of strategies to increase consumption of specialty crops; and establish the economic benefits, both individual and societal, for increased consumption.
  - Improve understanding the environmental, economic, and social implications of specialty crop production, processing, distribution, and marketing—including the production and transportation of all inputs (including energy) and the disposition of all wastes and byproducts—through the application of Life Cycle Assessment or other methods of systems-based analysis that incorporate the important contributions of cycles and feedback mechanisms.
4. New innovations and technology, including improved mechanization and technologies that delay or inhibit ripening; and:
- Improve post-harvest handling, transportation, and distribution systems and technologies: develop post-harvest systems and distribution channels that help to better maintain the “cold chain”, preserve nutritional value, and increase the shelf life of specialty crops (e.g., including, but not limited to: logistics, sorting, inspection, waste stream management, traceability, and packaging).
  - Remove key barriers to achieving labor savings and product quality enhancement in production and processing through research, development, application, and adoption of technologies: that foster automation, that sense plant health (including detecting viruses in whole plants or parts of plants) and product quality, that provide high resolution spatial and temporal information for decision making, and that are both robust and economical.
  - Develop new science, tools, and technology focused on the use and impacts of alternative sources of water (e.g., recycled, brackish groundwater) on: plant productivity and crop yield; product taste, quality and marketability; plant environmental responses and tolerances (e.g., salinity); and food safety and toxicity issues.
5. Methods to prevent, detect, monitor, control, and respond to potential food safety hazards in the production and processing of specialty crops, including fresh produce:
- Increase understanding of sources, persistence, growth and mechanism of transfer of food borne pathogens and assessing the relative risk of these sources in food systems (e.g., soil, irrigation water, manure, wild, agricultural and domestic animals, packing

sheds, transportation vehicles, warehouses, processing plants, retail outlets and household kitchens, and humans).

- Develop and adapt methods to identify and quantify food borne pathogens, chemical residues (e.g., fumigants), and tree nut allergens, with particular reference to sample preparation methods to aid in recovery of pathogenic microorganisms in complex matrices and rapid, robust, and field testable methods, test kits, and/or devices.
- Develop and implement mechanisms for collaboration among academia, government and industry to standardize methods of detection, developing standards/metrics for risk management and third party audits.
- Create a systems approach to risk management, including, but not limited to: establishing appropriate metrics, risk ranking of parameters for monitoring and interventions, and developing procedures for training managers; providing assistance in implementing risk management followed by evaluation.
- Develop, test and implement an interactive national database, networking, and data sharing system for effective risk management decisions and commodity-specific information to facilitate tracing the origin of contamination.

## **PART II—AWARD INFORMATION**

### **A. Available Funding**

There is no commitment by USDA to fund any particular application or to make a specific number of awards. Approximately \$47.3 million will be available to fund SCRI applications in FY 2010. Please refer to the Executive Summary for further details regarding funding ranges and project periods.

### **B. Types of Applications**

All applications will be reviewed competitively using the selection process and evaluation criteria described in Part V—Application Review Requirements. In FY 2010, the SCRI will accept the following two application types:

**(1) New application.** This is a project application that has not been previously submitted to SCRI. All new applications will be reviewed competitively using the selection process and evaluation criteria described in Part V—Application Review Requirements.

**(2) Resubmitted application.** This is an application that had previously been submitted to SCRI, but was not funded. Project Directors (PDs) must respond to the previous review panel summary. Resubmitted applications must be received by the relevant due dates, will be evaluated in competition with other pending applications in appropriate area to which they are assigned, and will be reviewed according to the same evaluation criteria as new applications.

### **C. Project Types**

**Standard Research and Extension Projects (SREPs)** will support targeted problem-solving efforts that *contribute* to the overall sustainability of a primary system or one of its components, and that would not otherwise qualify in scope and effort for support as a Coordinated Agricultural Project (CAP). Beginning with stakeholder-identified concerns, projects should seek solutions that lead to measurable benefit to producers and consumers. Applications should bring together both research and extension components of the agricultural knowledge system around a problem area or activity. Partnerships with end user groups (*e.g.*, industry, processors, manufacturers, growers, technology providers) are strongly encouraged, including the use of students in key research and extension roles (*e.g.*, internships and other opportunities for students to engage with stakeholders and their needs). For each SREP award, there is an expectation that an advisory panel will be formed to inform the program throughout its life, including the identification and prioritization of research and extension objectives. Applications should detail the creation and functions of this panel. The project must contribute to long-term profitability and sustainability of specialty crop production, processing or marketing systems. Further, the project must bring together biological, physical, and social scientists, as appropriate to project goals and address economic, environmental, **and** social aspects of specialty crop sustainability. SREPs represent the “focused science and application studies” portion of the systems diagram on page four. SREPs will have a project period ranging up to five years.

Applications must include, as an appendix, a timeline that clearly identifies which key personnel are involved in which objectives during each time segment of the project. This appendix should also identify short-, medium- and long-term metrics that will be used in project evaluation, the expectations for each team member, a mechanism whereby progress metrics can be evaluated, and how the project will complement and/or link to existing programs or projects.

**Coordinated Agricultural Projects (CAPs)** will be awarded to consortia or groups of qualified applicants *to address multiple components of a primary system, an entire primary system or problems that cut across primary systems*, with the expectation that the project will make strong contributions to the sustainability of the system or system component. These projects would apply trans-disciplinary, multi-functional, and, where appropriate, multi-institutional approaches to provide viable solutions to the highest priority stakeholder needs. An aim of a CAP award is to encourage maximum flexibility in applied research and extension. Applications will be evaluated based on how well their goals and objectives respond to current stakeholder needs. It is recognized, however, that as a project's comprehensive approach unfolds, unexpected advances and promising leads, or unforeseen new national needs related to project goals and objectives, may be identified. CAPs will have a project period ranging from three to five years.

CAP applications are expected to demonstrate coherent and complementary integrated activities with the ultimate goal of developing a strategy or solution that could be implemented for specialty crops. Applications are expected to take advantage of recent advances in biological, physical, and social and economic sciences and to translate basic discoveries and knowledge to practical applications. The project must contribute to long-term profitability and sustainability of specialty crop production, processing or marketing systems. The application's methodology and analytical approach must be appropriate to project objectives; the continuity plan, that describes how the partnership effort will continue beyond the period of NIFA funding, must address future long-term plans for proposed activities; and effectively combine research and extension activities. For CAPs requesting larger budgets, applications are expected to demonstrate the potential to develop a national strategy or solution as an ultimate goal. This would include an intent to promote collaboration, open communication, the exchange of information and development of resources that accelerate the application of scientific discovery and technology to solving the needs of various specialty crop industries. Such a national CAP should aim to reduce duplication of efforts and integrate activities among individuals, institutions, states, and regions. Therefore, applications should clearly articulate how the national-scope CAP they are proposing would complement and/or link with existing programs or projects.

A CAP must seek to bring together a multi-state, multi-institutional, and/or trans-disciplinary team to integrate scientific discoveries and technology with practical application; and provide complementary extension efforts to bring science-based information to relevant audiences that will allow them to make informed decisions. For each CAP award, there is an expectation that an advisory panel will be formed to inform the program throughout its life, including the identification and prioritization of research and/or extension objectives. Applications must detail the creation and functions of this panel.

CAP teams should be comprised of members working in discovery, learning, and engagement to conduct research and extension utilizing systems science and trans-disciplinary approaches on an emerging or priority area important to specialty crops. This integrated team should contain

expertise in biological science disciplines, physical science and engineering disciplines, socio-economic sciences, extension, and program evaluation, as appropriate, as well as expertise from principal stakeholders and partners. Partnerships with end-user groups (*e.g.*, industry, processors, manufacturers, growers, technology providers) are strongly encouraged, along with the use of undergraduate students in key research and extension roles (*e.g.*, internships and other opportunities for students to engage with stakeholders and their needs). The application should outline the potential of the CAP team, its structure, coordination and plan of implementation.

As a result, there is an expectation that objectives may be redirected and/or new objectives may be developed with associated budget adjustments. To encourage flexibility, the program does not expect that all investigators associated with the proposed project will be supported throughout its duration.

Applications must include, as an appendix, a budgeted project management plan and timeline to ensure efficient functioning of the CAP team. A timeline chart that clearly identifies which key personnel are involved in which objectives during each time segment of the project is particularly helpful. This plan should include an organizational chart, administrative timeline, a description of how the project will be governed, intellectual property management, and identification of short-, medium- and long-term metrics that will be used in project evaluation, the expectations for each team member, a mechanism whereby progress metrics can be evaluated, and how the project will complement and/or link to existing programs or projects to include multi-disciplinary, multi-institutional, multi-state and trans-disciplinary collaborations. Given the size and scope of CAP projects, applicants are strongly encouraged to include in their budget funds for a half-time or full-time (as appropriate) project management position to deal with day-to-day project operations, coordination, and mechanics. The management plan must include a strategy to become self-supporting by the end of the project period. (See Part IV (B) (3) (c) – Field 11 for attachment instructions.)

Applications must include, as an appendix, a budgeted plan and timeline for an advisory group of principal stakeholders and scientists relevant to the proposed research and extension projects (*e.g.*, include letters of commitment and rationale for their role) to assess and evaluate the quality, potential outcomes, and impacts, and how they could function effectively to support the goals and objectives of the CAP). See Part IV (B) (3) (c) – Field 11 for attachment instructions.

**Regional Partnerships for Innovation (RPIs).** As new technologies emerge from the SCRI and other research and extension programs, there will be a need to help those products reach commercialization so that they become available for adoption by specialty crop industries. The Federal Small Business Innovation Research (SBIR) programs help individual small businesses develop and prototype pre-commercial products and services. However, there often remains a gap in organizational and networking resources resulting in a lack of “support networks” that encourage **regional economic development** to bring these new products and services to market. Additional partnership efforts are needed to commercialize new technologies, bring them to market, and ensure that the financial, human, and intellectual capital are present for the long term. Broad-based partnerships can provide the local or regional organizational infrastructure needed to fully exploit future technology commercialization and adoption. It is anticipated that research and extension efforts might, for example, be used to: seed innovative approaches and technology leading to new product development; conduct market research for recently

developed, or anticipated, technology products; better understand and develop mitigation strategies for technology adoption roadblocks; and investigate and test new business models particularly tailored to the unique needs of specialty crop industries. These networks would be comprised of partnerships among universities, community colleges, local governments, financial stakeholders, end-user industries, manufacturers, community organizations, etc. RPI awards will support the initial development of regional partnerships with the expectation that they would be self-supporting by the end of a grant's project period. RPI applications will have a project period of two to three years.

RPIs should serve one or more stakeholder industries, both seeking their participation and incorporating their input. It is expected that each funded partnership will operate within a delineated geographic extent and include participants appropriate to that geography and stated stakeholder communities. Participant roles and responsibilities will focus on particular partnership objectives and the anticipated outputs and outcomes for the project. Applicants must demonstrate how their RPI efforts will contribute to the commercialization of new products or services and contribute to regional economic development. For each RPI award, there is an expectation that an advisory panel will be formed to inform the program throughout its life, including the identification and prioritization of research and/or extension objectives. Applications must detail the creation and functions of this panel.

The application must demonstrate an understanding and application of a whole system(s) approach with the potential for the partnership to contribute to long-term profitability and sustainability of specialty crop production, processing, or marketing systems. The application must demonstrate that the project brings together biological, physical, and social scientists, as appropriate, to project goals to address economic, environmental, **and** social aspects of specialty crop sustainability.

RPIs developed under this initiative should articulate how their approach can serve as a model for innovation by other industries and other locales. A continuity plan should also be included that describes how the partnership effort will continue beyond the period of NIFA funding.

**eXtension Projects.** NIFA encourages the development of information and educational content to advance the widespread adoption of research-based practices and technologies by producers and other end users. Groups of qualified individuals will receive grants to develop new eXtension Communities of Practice (CoPs) and/or support the enhancement of existing CoPs to ensure that information and technology transfer reach potential adopters as quickly as possible. The application must demonstrate an understanding and application of a whole system(s) approach with the potential for the project to contribute to long-term profitability and sustainability of specialty crop production, processing and marketing systems. The project must bring together biological, physical, and social scientists, as appropriate, to project goals to address economic, environmental, **and** social aspects of specialty crop sustainability.

Applicants establishing new CoPs (or enhancing existing ones) must first follow the corresponding steps outlined by eXtension.org ([http://about.extension.org/wiki/eXtension\\_Information\\_for\\_Responding\\_to\\_NIFA\\_RFAs](http://about.extension.org/wiki/eXtension_Information_for_Responding_to_NIFA_RFAs)). In addition to addressing the relevance criteria established for the SCRI, eXtension applications

should also address in their narrative the Key Criteria listed on the above eXtension web site. eXtension applications will have a project period of three to five years.

**Please see the following links for more information:**

**eXtension**

[http://about.extension.org/mediawiki/files/5/51/EXECUTIVE\\_SUMMARY -  
\\_March\\_14%2C\\_2006\\_-\\_YEAR\\_2.pdf](http://about.extension.org/mediawiki/files/5/51/EXECUTIVE_SUMMARY_-_March_14%2C_2006_-_YEAR_2.pdf)

**eXtension Implementation Plan**

<http://about.extension.org/wiki/Planning>

**Communities of Practice**

[http://about.extension.org/wiki/Glossary\\_of\\_eXtension\\_Terms#Community\\_of\\_Practice  
.28CoP.29\)](http://about.extension.org/wiki/Glossary_of_eXtension_Terms#Community_of_Practice_.28CoP.29)

**Research and Extension Planning Projects** are intended to provide assistance to applicants in the development of quality future SREP, RPI, or CAP proposals. Priority will be given to applicants who: (1) can demonstrate limited resources for submitting large grant applications, (2) articulate benefits accrued from formal planning activities, and (3) submit applications containing evidence of a high likelihood that quality future applications will be submitted for SCRI projects. Applications are encouraged for meetings that bring together biological, physical, and social scientists and others, as appropriate, including end-users and technology providers, to identify research and/or extension needs, update information, and advance understanding of specialty crop issues and problems. This information should be used to build teams that can develop applications to address the identified challenges using a systems-based, trans-disciplinary approach. The application must develop a whole system(s) approach with the potential for the project to contribute to long-term profitability and sustainability of specialty crop production, processing or marketing systems. Project goals must address economic, environmental, and social aspects of specialty crop sustainability. These activities can take the form of workshops or symposia and may constitute an initial step in preparing a SCRI application in subsequent years. Applicants should be careful to ensure that participants represent a broad range of expertise by detailing the types of participants who will be invited. Note: The intent of these planning projects is to foster collaboration and networking opportunities to enhance the preparation of future high-quality grant applications. This project type does not support preliminary research. However, support for stakeholder survey activities may be requested, where appropriate and necessary.

Research and Extension Planning Proposal awards of Federal funds will not exceed \$50,000, and are not renewable. It is expected that planning activities supported by this program will occur within 12 months of awards being issued. Applicants for Research and Extension Planning Proposals should be mindful that the 100 percent matching requirement also applies to these awards. Proposals should demonstrate measurable, cost effective benefits from any proposed planning activities requested.

NIFA expects that applicants will consult with specialty crop producers, processors and/or consumers before developing SCRI project applications. Stakeholders should play an important role in developing project goals and objectives; in implementing the experimental or extension plan; and in evaluating and disseminating project results and outcomes. Farmers and others with little training or experience in developing and implementing research and outreach projects are encouraged to consult with appropriate specialists. These specialists might include university scientists and Extension personnel or production consultants with scientific training. Projects must involve work that is necessary, both in terms of stakeholder preferences and the magnitude of the problem. An outcome-oriented plan for disseminating information derived from project work must be an integral part of the project.

**Further guidelines for outreach/extension for all project types (except Planning Grants and eXtension Grants).**

Any proposed positions and their programmatic foci should be integral to an application's outreach plan and the needs of stakeholder organizations, and have clearly stated responsibilities and duties related to that plan.

## PART III—ELIGIBILITY INFORMATION

### A. Eligible Applicants

For the Specialty Crop Research Initiative, applications may be submitted by Federal agencies, national laboratories, colleges and universities, research institutions and organizations, private organizations or corporations, State agricultural experiment stations, Cooperative Extension Services, individuals, or groups consisting of two or more of these entities.

Award recipients may subcontract to organizations not eligible to apply provided such organizations are necessary for the conduct of the project. An applicant's failure to meet an eligibility criterion by the time of an application deadline will result in NIFA returning the application without review or, even though an application may be reviewed, will preclude NIFA from making an award.

### B. Cost Sharing or Matching

The recipient of a grant under the Specialty Crop Research Initiative must provide funds or in-kind support from non-Federal sources in an amount that is *at least equal to* the amount provided by the SCRI. There is no provision for waiver of this requirement (please see Part IV (B) (6) for more information).

Applicants may use both the unrecovered indirect costs associated with the Federal Budget and the unrecovered indirect costs associated with the Non-Federal Budget to meet their matching requirements. However, indirect costs may not be recovered on third-party matching contributions.

The example below may assist applicants in preparing their Federal and Non-Federal Budgets when considering the use of unrecovered indirect costs as a matching contribution. For example, an applicant is submitting an application with a total budget of \$100,000 and their negotiated indirect cost rate is 55 percent.

	Federal Budget	Non-Federal
Budget		
Direct costs	\$78,000	\$51,032
Indirect cost (allowable as part of the Federal Budget*)	22,000	
Unrecovered indirect costs attributed to the Federal Budget		20,900
Unrecovered indirect costs attributed to the Non-Federal Budget		28,068
Total Budget	\$100,000	\$100,000

This example assumes no capital equipment expenditures as part of the Federal Budget or third-party matching contributions as part of the Non-Federal Budget.

\*limited to 22 percent of the Federal funds requested

## PART IV—APPLICATION AND SUBMISSION INFORMATION

### A. Electronic Application Package

Only electronic applications may be submitted via Grants.gov to NIFA in response to this RFA.

Prior to preparing an application, it is suggested that the PD/PI first contact an Authorized Representative (AR) (also referred to as Authorized Organizational Representative or AOR) to determine if the organization is prepared to submit electronic applications through Grant.gov. If the organization is not prepared, the AR should see [http://www.grants.gov/applicants/get\\_registered.jsp](http://www.grants.gov/applicants/get_registered.jsp) for steps for preparing to submit applications through Grants.gov.

The steps to access application materials are as follows:

1. In order to access, complete and submit applications, applicants must download and install a version of Adobe Reader compatible with Grants.gov. This software is essential to apply for NIFA Federal assistance awards. For basic system requirements and download instructions, please see [http://www.grants.gov/help/download\\_software.jsp](http://www.grants.gov/help/download_software.jsp). To verify that you have a compatible version of Adobe Reader, Grants.gov established a test package that will assist you in making that determination. Grants.gov Adobe Versioning Test Package: <http://www.grants.gov/applicants/AdobeVersioningTestOnly.jsp>.
2. The application package must be obtained via Grants.gov, go to <http://www.grants.gov>, click on “Apply for Grants” in the left-hand column, click on “**Step 1: Download a Grant Application Package and Instructions**,” enter the funding opportunity number **USDA-NIFA-SCRI-002672** in the appropriate box and click “Download Package.” From the search results, click “Download” to access the application package.

Contained within the application package is the “NIFAGrants.gov Application Guide: A Guide for Preparation and Submission of NIFA Applications via Grants.gov.” This Guide contains an introduction and general Grants.gov instructions, information about how to use a Grant Application Package in Grants.gov, and instructions on how to complete the application forms.

**If assistance is needed to access the application package** (e.g., downloading or navigating Adobe forms), refer to resources available on the Grants.gov Web site first (<http://grants.gov/>). Grants.gov assistance is also available as follows:

- Grants.gov customer support  
Toll Free: 1-800-518-4726  
Business Hours: Monday through Friday 7:00 am – 9:00 pm Eastern Time  
Email: [support@grants.gov](mailto:support@grants.gov)

## **B. Content and Form of Application Submission**

Electronic applications should be prepared following Part V and VI of the document entitled “A Guide for Preparation and Submission of NIFA Applications via Grants.gov.” This guide is part of the corresponding application package (see Section A. of this Part). The following is **additional information** needed in order to prepare an application in response to this RFA. If there is discrepancy between the two documents, the information contained in this RFA is overriding.

**Note the attachment requirements (e.g., portable document format) in Part III section 3. of the Guide. ANY PROPOSALS CONTAINING NON-PDF DOCUMENTS WILL BE AT RISK OF BEING EXCLUDED FROM NIFA REVIEW. Incomplete applications will be excluded from NIFA review. With documented prior approval, resubmitted applications will be accepted until close of business on January 14, 2010 (5:00 p.m. Eastern Time).**

**If you do not own PDF-generating software, Grants.gov provides online tools to assist applicants. Users will find a link to “Convert Documents to PDF” on <http://grants.gov/assets/PDFConversion.pdf>.**

### **1. SF 424 R&R Cover Sheet**

Information related to the questions on this form is dealt with in detail in Part V, 2. of the NIFA Grants.gov Application Guide.

### **2. R&R Project/Performance Site Location(s)**

Information related to the questions on this form is dealt with in detail in Part V, 3. of the NIFA Grants.gov Application Guide.

### **3. R&R Other Project Information Form**

Information related to the questions on this form is dealt with in detail in Part V, 4. of the NIFA Grants.gov Application Guide.

**a. Field 6 - Project Summary/Abstract.** The Project Summary may not exceed **250 words** on one page, and should clearly indicate the appropriate project type (as described in Part II (C)). The summary should also include the relevance of the project to the goals of the SCRI. The importance of a concise, informative Project Summary cannot be overemphasized. This word and page limitation applies regardless of whether figures or tables are included. These maximums have been established to ensure fair and equitable competition. Research and Extension Planning Projects must *also* state the objectiveness of any workshop or symposia as well as the proposed location and probable inclusive date(s) of the activity.

**b. Field 7 - Project Narrative.** PLEASE NOTE: the Project Narrative section may not exceed a total of 25 single- or double-spaced pages, including figures and tables. The Introduction may not exceed 5 pages, and the rest of the Project Narrative may not exceed 20 pages. **Research and Extension Planning narratives may not exceed 15 single- or double-spaced pages, including figures and tables.** These SCRI page limitations apply regardless of whether figures or tables are included. All pages, including those with figures and tables, should be numbered sequentially. Applications exceeding the applicable page limitation will be at risk of being

excluded from review. These maximums have been established to ensure fair and equitable competition.

**The Project Narrative must include all of the following:**

(i) Resubmitted applications must provide a detailed response to the previous review. The response should be as concise as possible, but there is no limit to the number of pages that may be submitted. If available, please include the Grants.gov number or NIFA proposal number of the previous submission. The response to the previous review **is not** counted against the page limit of the Project Narrative.

(ii) As the first page (or more as needed) of the project narrative of new applications or immediately following the response to the previous review of resubmitted applications, all applications must include the following information in a combined executive summary and table of contents (table format preferred). The executive summary and table of contents does not count toward the narrative's page limitation. Applications without an executive summary will **NOT** be considered for funding.

1. Project title
2. Project type (see Part II(C))
3. List the legislatively mandated focus area(s) being addressed (see Part I (B)), and provide an estimate of the percentage of effort/funds dedicated to each (sum of percentages should equal 100 percent).
4. Program Staff – include name, title, affiliation, address, and e-mail for PD(s), Co-PD(s) and Key Personnel.
5. A brief summary (2-3 sentences) describing the critical stakeholder need addressed by the project and the project's long-term goals (provide cross-references to full descriptions in the narrative).
6. A brief summary (2-3 sentences) of the outreach plan proposed by the project (provide a cross-reference to the full description in the narrative).
7. A brief summary (2-3 sentences) describing potential economic, social, and environmental benefits (Who benefits and how?).
8. A brief summary (2-3 sentences) describing stakeholder engagement throughout the project (provide a cross-reference to the full description in the narrative).

(iii) Introduction. List the following:

1. Provide a clear statement of the long-term goal(s), the critical need(s) of specialty crop industries being addressed, and supporting outreach objectives or research questions.
2. Describe how stakeholders were engaged to identify project goals and objectives, and as appropriate how stakeholder involvement will continue.
3. Summarize the body of knowledge or other past activities that substantiate the need for the proposed project.
4. Describe ongoing or recently completed significant activities related to the proposed project including the work of key project personnel. Applications should also demonstrate how duplication of effort with similar activities by others will be avoided.

5. Preliminary data/information pertinent to the proposed work should be included in this section. All works cited should be referenced and attached at Field 8 on the Form, Bibliography & Reference Cited. Refer to Part V, 3.8 of the NIFA Grants.gov Application Guide.

(iv) Rationale and Significance. Concisely present the rationale behind the proposed research and/or extension activities. The specific relationship of the project's objectives to one or more of the SCRI focus areas should be shown clearly. These purposes and focus areas are described under Part I, B, Purpose and Priorities. Any novel ideas or contributions that the proposed project offers should also be discussed in this section.

(v) Approach – **For CAPs, SREPs, RPIs, and eXtension Projects** (*for Research and extension Planning Projects see (vi) below*):

The activities proposed or problems being addressed must be clearly stated and the approaches being applied clearly described. Specifically, this section must include:

1. A description of the activities proposed, key personnel or institution roles in those activities, and the sequence in which the activities are to be performed (a Gantt chart or other task X time representation of project activities is desirable);
2. Methods to be used in carrying out the proposed project, including the feasibility of the methods (clearly describe the systems thinking used in the project methodology and the contribution of trans-disciplinary approaches);
3. Expected outcomes, including how the project expects to contribute to long-term profitability and sustainability of specialty crops;
4. Means by which results will be analyzed, assessed, or interpreted;
5. How results or products will be used;
6. Outreach plan: including, where appropriate, science-based tools disseminated, participants involved in delivery, and how impacts will be measured;
7. Pitfalls that may be encountered;
8. Limitations to proposed procedures; and
9. A full explanation of any materials, procedures, situations, or activities related to the project that may be hazardous to personnel, along with an outline or precautions to be exercised to avoid or mitigate the effects of such hazards.

(vi) Approach – **For Research and Extension Planning Projects**:

1. A justification for the meeting (see Part IIC);
2. Recent meetings on the same subject with dates and locations;
3. Names and organizational affiliations of the chair and other members of the organizing committee;
4. A proposed program (or agenda) for the activity, including a listing of scheduled participants and their institutional affiliations (see Part IIC);
5. Expected outcomes, including how the planning project expects to contribute to development of a successful application for an SCRI CAP, SREP, or RPI, and
6. The method of announcement or invitation that will be used.

### **c. Field 11 - Other Attachments – PDF**

Depending on the type of application, other attachments are required. Please see the description of each project type in Part II(C) for both specific and general information that may be attached here.

- **Response to Previous Review - PDF Attachment.** This requirement only applies to “Resubmitted Applications” as described under Part II, B., “Types of Applications”. PDs must respond to the previous review panel summary on **no more than one page**, titled, “RESPONSE TO PREVIOUS REVIEW.” If desired, additional comments may be included in the text of the Project Narrative, subject to the page limitations of that section.
- **Appendices to Project Description – PDF Attachment.** Appendices to the Project Description are allowed if they are directly germane to the proposed project. **The addition of appendices should not be used to circumvent the text and/or figures and tables page limitations.** For example the CAP project type requires specific information which should be attached, as described below:

*CAP applications must include, as an appendix, a budgeted plan and timeline for an advisory group of principal stakeholders and scientists relevant to the proposed research and extension projects (e.g., include letters of commitment and rationale for their role) to assess and evaluate the quality, potential outcomes, and impacts, and how they could function effectively to support the goals and objectives of the specific project type within SCRI.*

- **Collaborative Arrangements – PDF Attachment. No Page Limit.** If it is necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. If the consultant(s) or collaborator(s) are known at the time of the application, a vitae or resume should be provided. In addition, evidence (e.g., letter of support signed by the AR of the consultant/collaborating organization) should be provided as evidence that the collaborators involved have agreed to render these services. The applicant also will be required to provide additional information on consultants and collaborators in the budget portion of the application.

### **4. R&R Senior/Key Person Profile (Expanded)**

Information related to the questions on this form is dealt with in detail in Part V, 5. of the NIFA Grants.gov Application Guide.

**5. R&R Personal Data** – As noted in Part V, 6. of the NIFA Grants.gov Application Guide, the submission of this information is voluntary and is not a precondition of award. If completing the information, **do not enter any data in the field requesting the social security number.**

## **6. R&R Budget**

Information related to the questions on this form is dealt with in detail in Part V, 7. of the NIFA Grants.gov Application Guide.

### **For all projects:**

*Matching:* Applications shall include written verification of commitments of matching support from non-federal sources (including both cash and fair market value of in-kind contributions from third parties). **The non-federal amount must be equal to the amount awarded by the Federal government.** All matching must be secured to be considered. Must provide evidence of the required amount of matching prior to award and should be included in the proposal. Written verification means:

For any third party cash contributions, a separate pledge agreement for each donation, submitted on the donor organization's letterhead signed by the authorized representative of the donor organization and the applicant organization and to include the title of the person signing as the AR, which must include: (1) the name, address, and telephone number of the donor; (2) the name of the applicant organization; (3) the title of the project for which the donation is made; (4) the dollar amount of the cash donation; and (5) a statement that the donor will pay the cash contribution during the grant period and specifying the recipient may use the cash donation as they deem necessary or a statement on how the cash is to be used on the project.

For any third party in-kind contributions, a separate pledge agreement for each contribution submitted on Donor Organization letterhead and signed by the AR of the donor organization and the applicant organization, which must include: (1) The name, address, and telephone number of the donor; (2) the name of the applicant organization; (3) the title of the project for which the donation is made; (4) a good faith estimate of the current fair market value of the third party in-kind contribution; and (5) a statement that the donor will make the contribution during the grant period.

The sources and the amount of all matching support from outside the applicant organization should be summarized on a separate page and placed in the application as a part of the Budget Justification attachment (see Field K on the Form R&R Budget). Include the matching amount, the budget category for the match, and detail how the matching support, *from each source*, will be used (e.g., salary and position supported). Additionally, all pledge agreements must be included as a PDF attachment in Field K as well. Cash donations should be shown on the budget form in the categories where it will be used (i.e., travel, salaries, etc) and explained in the budget justification for matching.

The value of applicant contributions to the project shall be established in accordance with the applicable cost principles. Applicants should refer to OMB Circulars A-21, Cost Principles for Educational Institutions; A-87, Cost Principles for State, Local, and Tribal Governments; A-122, Cost Principles for Non-Profit Organizations; 2 CFR Part 215, Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations (OMB Circular A-110); and the cost principles in the Federal Acquisition Regulation at 48 CFR 31.2 for further guidance and other requirements relating to matching and allowable costs.

### **Additional Budget Information**

*For Research and Extension Planning Projects:* The budget for the planning activity may include an appropriate amount for transportation and subsistence costs for participants and for other related costs. Planning awards of federal funds will not exceed \$50,000 and are not renewable. Include an itemized breakdown of all support requested in the Budget Justification (Field K. of the R&R Budget).

*Project Director Workshop:* It is the intent of the Specialty Crop Research Initiative to require successful applicants or a designee to attend at least one project director workshop during the term of their project. For the purposes of budget development, applicants are required to request funds for attending at least one such workshop. The request for these funds should be clearly indicated in the budget narrative section of the application.

**Applicants who wish to use unrecovered indirect costs to meet the matching requirements should indicate, if applicable, what amount is attributed to the Federal budget and what amount is attributed to the non-Federal budget.**

### **7. Supplemental Information Form**

Information related to the questions on this form is dealt with in detail in Part VI, 1. of the NIFA Grants.gov Application Guide.

**a. Field 2. Program Code.** Enter the program code name (i.e., enter “Specialty Crop Research Initiative”) and the program code (i.e., enter “SCRI”).

**b. Field 3. Type of Applicant.** Enter the type of Applicant/Organization.

**c. Field 8. Conflict of Interest List.** A conflict of interest list is required by this program.

### **C. Submission Dates and Times**

**Instructions for submitting an application are included in Part IV, Section 1.9 of the NIFA Grants.gov Application Guide.**

Complete, error-free applications must be accepted by Grants.gov by **January 14, 2010 (5:00 p.m., or earlier Eastern Time)**. Applications received after this deadline will normally not be considered for funding. The agency strongly encourages applicants to submit applications well before the deadline to allow time for correction of technical errors identified by Grants.gov.

Correspondence regarding submitted applications will be sent using e-mail. Therefore, applicants are strongly encouraged to provide accurate e-mail addresses, where designated, on the SF-424 R&R Application for Federal Assistance.

If the AR has not received correspondence **from NIFA** regarding a submitted application within 30 days of the submission deadline of the program, please contact the Program Contact identified in Part VII of this RFA and request the proposal number assigned to the application. **Failure to do so may result in the application not being considered for funding by the peer review**

panel. Once the application has been assigned a proposal number, this number should be cited in all future correspondence.

## **D. Funding Restrictions**

### **1. Indirect Costs**

Section 7132 of the Food, Conservation, and Energy Act of 2008, amended the National Agriculture Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3310(a)), limiting indirect costs to 22 percent of the total Federal funds provided under each award. Therefore, when preparing budgets, applicants should limit their requests for recovery of indirect costs to the lesser of their institution's official negotiated indirect cost rate or the equivalent of 22 percent of total Federal funds awarded. If no rate has been established the applicant may indicate "None—will negotiate" and a reasonable dollar amount for indirect costs may be requested, which will be subject to approval by USDA. In the latter case, if a proposal is recommended for funding, an indirect cost rate proposal must be submitted prior to award to support the amount of indirect costs requested. NIFA will request an indirect cost rate proposal and provide instructions, as necessary. An applicant may elect not to charge indirect costs and, instead, use all grant funds for direct costs. If indirect costs are not charged, the phrase "None requested" should be written in this space.

**PLEASE NOTE: In accordance with section 731 of the FY 2010 Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations Act, for the purposes of a grant made under section 412 of the Agricultural Research, Extension, and Education Reform Act of 1998, which established SCRI, in-kind support from non-Federal sources in the form of unrecovered indirect costs for both the Federal Budget and Non-Federal Budget may be used to meet the matching requirements under 412(e)(3). These indirect costs are those that are not otherwise charged against the grant and must be consistent with the approved indirect cost rate of the organization.**

### **2. Construction and Renovation**

Funds made available under SCRI shall not be used for the construction of a new building or facility or the acquisition, expansion, remodeling, or alteration of an existing building or facility (including site grading and improvement, and architect fees).

## **E. Other Submission Requirements**

The applicant should follow the submission requirements noted in the document entitled "A Guide for Preparation and Submission of NIFA Applications via Grants.gov."

## **PART V—APPLICATION REVIEW REQUIREMENTS**

### **A. General**

Each application will be evaluated in a two-part process. First, each application will be screened to ensure that it meets the administrative requirements as set forth in this RFA. Administrative requirements include: meeting the application deadline, meeting eligibility requirements, satisfying program intent, providing evidence of 100 percent non-federal matching funds and inclusion of all required sections of the application package. Applications that meet these requirements will be technically evaluated by a review panel.

Section 7301 of the Food, Conservation, and Energy Act of 2008, amended section 103(a) of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA) (7 U.S.C. 7613(a)) by stating that Peer and Merit review procedures *shall not* take the offer or availability of matching funds into consideration. Therefore, while matching is required under SCRI, it will only be considered as part of the administrative review and will not be included in the Peer and Merit Review (see Part III (B) for more information).

Reviewers will be selected based upon training and experience in relevant scientific, extension, or education fields, taking into account the following factors: (a) The level of relevant formal scientific, technical education, or extension experience of the individual, as well as the extent to which an individual is engaged in relevant research, education, or extension activities; (b) the need to include as reviewers experts from various areas of specialization within relevant scientific, education, or extension fields; (c) the need to include as reviewers other experts (e.g., producers, range or forest managers/operators, and consumers) who can assess relevance of the applications to targeted audiences and to program needs; (d) the need to include as reviewers experts from a variety of organizational types (e.g., colleges, universities, industry, state and Federal agencies, private profit and non-profit organizations) and geographic locations; (e) the need to maintain a balanced composition of reviewers with regard to minority and female representation and an equitable age distribution; and (f) the need to include reviewers who can judge the effective usefulness to producers and the general public of each application.

### **B. Evaluation Criteria**

The evaluation criteria below will be used in reviewing applications submitted in response to this RFA and the specific Project Types described in Part II(C):

## Criteria for Standard Research and Extension Projects (SREPs)

### 1. Proposal Relevance (50 points):

- (a) Documented need (10 points). Application includes documentation substantiating that project is directed to current or likely future problems/challenges in specialty crop agriculture;
- (b) Stakeholder involvement (10 points). Application includes information on how stakeholders were selected and how their input was solicited and incorporated;
- (c) Outreach plan (10 points). Application includes a detailed outreach plan that includes project benefits and a description of how impacts will be measured, including the likelihood that the project will provide solutions that lead to measurable benefits to producers and consumers;
- (d) Systems-based approach (10 points). Application demonstrates understanding of a whole system(s) approach and discusses how the project will contribute to an integrated systems solution to the identified problem. The project must contribute to long-term profitability and sustainability of specialty crop production, processing or marketing systems; and
- (e) Trans-disciplinary approach (10 points). Application documents that the project brings together biological, physical, and social scientists as appropriate to project goals to address economic, environmental, **and** social aspects of specialty crop sustainability.

### 2. Proposal Quality (50 points):

- (a) Conceptual adequacy (10 points). Application clearly states objectives that are potentially attainable within project time, scope and budget;
  - (b) Design (15 points). The application's methodology and analytical approach are appropriate to project objectives, and effectively combines research and extension activities;
  - (c) Involvement of appropriate, relevant expertise (5 points);
  - (d) Experience of senior/key project personnel (5 points);
  - (e) Appropriateness of budget (5 points);
  - (f) Feasibility, probability of success, including the likelihood that the project will contribute to the overall sustainability of a component or primary system (5 points); and
  - (g) Adherence to guidelines (5 points).
-

## Criteria for Coordinated Agricultural Projects (CAPs)

### 1. Proposal Relevance (50 points):

- (a) Documented need (10 points). Application includes documentation substantiating that project is directed to current or likely future problems/challenges in specialty crop agriculture;
- (b) Stakeholder involvement (10 points). Application includes information on how stakeholders were selected and how their input was solicited and incorporated;
- (c) Outreach plan (10 points). Application includes a detailed outreach plan that includes project benefits and a description of how impacts will be measured;
- (d) Systems-based approach (10 points). Application demonstrates an understanding of a whole system(s) approach and *applies* that approach to overcoming the identified problem. The project must contribute to long-term profitability and sustainability of specialty crop production, processing or marketing systems; and
- (e) Trans-disciplinary approach (10 points). Application documents that the project brings together expertise in biological science disciplines, physical science and engineering disciplines, socio-economic sciences, extension, and program evaluation, as appropriate, as well as expertise from principal stakeholders and partners. Project goals should address economic, environmental, **and** social aspects of specialty crop sustainability.

### 2. Proposal Quality (50 points):

- (a) Conceptual adequacy (10 points). Application clearly states objectives that are potentially attainable within project time, scope, and budget;
  - (b) Design (15 points). The application's methodology and analytical approach are appropriate to project objectives, a continuity plan addresses future long-term plans for the proposed activities, and effectively combines research and extension activities;
  - (c) Involvement of appropriate, relevant expertise (5 points);
  - (d) Experience of senior/key project personnel (5 points);
  - (e) Appropriateness of budget (5 points);
  - (f) Feasibility, probability of success (5 points); and
  - (g) Adherence to guidelines (5 points).
-

## **Criteria for Regional Partnerships for Innovation (RPIs)**

### **1. Proposal Relevance (50 points):**

- (a) Documented need (10 points). Application includes documentation substantiating that project is directed to current or likely future problems/challenges in specialty crop agriculture;
- (b) Stakeholder involvement (10 points). Application includes information on how stakeholders were selected and how their input was solicited and incorporated;
- (c) Outreach plan (10 points). Application includes a detailed outreach plan that includes project benefits and a description of how impacts will be measured;
- (d) Systems-based approach (10 points). Application demonstrates an understanding and application of a whole system(s) approach with the potential for the partnership to contribute to long-term profitability and sustainability of specialty crop production, processing, or marketing systems; and
- (e) Trans-disciplinary approach (10 points). Application documents that the project brings together biological, physical, and social scientists as appropriate to project goals to address economic, environmental, **and** social aspects of specialty crop sustainability.

### **2. Proposal Quality (50 points):**

- (a) Conceptual adequacy (10 points). Application clearly states objectives which are potentially attainable within project time, scope and budget;
  - (b) Design (15 points). The application's methodology and analytical approach are appropriate to project objectives, including the likelihood that the proposed project approach will serve as a model for innovation by other industries and other locales;
  - (c) Involvement of appropriate, relevant expertise (5 points);
  - (d) Experience of senior/key project personnel (5 points);
  - (e) Appropriateness of budget (5 points);
  - (f) Feasibility, probability that proposed project will successfully create the initial development of regional partnerships that encourage regional economic development (5 points); and
  - (g) Adherence to guidelines (5 points).
-

## Criteria for eXtension Projects

### 1. Proposal Relevance (50 points):

- (a) Documented need (15 points). Application includes documentation substantiating that project is essential in helping producers, processors and/or consumers to overcome current or likely future problems/challenges in specialty crop agriculture;
- (b) Stakeholder involvement (15 points). Application includes information on how stakeholders were selected and how their input was solicited and incorporated;
- (c) Systems-based approach (10 points). Application demonstrates an understanding and application of a whole system(s) approach with the potential for the project to contribute to long-term profitability and sustainability of specialty crop production, processing, or marketing systems; and
- (d) Trans-disciplinary approach (10 points). Application documents that the project brings together biological, physical, and social scientists as appropriate to project goals to address economic, environmental, **and** social aspects of specialty crop sustainability.

### 2. Proposal Quality (50 points)

- (a) Community of Practice (10 points). Application describes the CoP, including a plan to increase the CoP membership, and a CoP leadership and management plan;
  - (b) Community of Interest (15 points). Application describes the CoI to be served and methods the CoP will use to engage the CoI with educational products and programs on a continuing basis; and
  - (c) Plan of Work (25 points). Application includes a logic model description that adequately demonstrates procedures for the development of the following:
    - a functioning and sustainable CoP including inputs, outputs, and outcomes;
    - a detailed plan of content aggregation, evaluation and development/repackaging for year one and maintenance, sustainability, and evolution over time;
    - a scope of work for the proposed CoP over the first 12 months; a brief description of deliverables for years two and three;
    - an anticipated date of CoP inclusion in the eXtension public site (public release); and
    - documented resources currently available to this proposed CoP and plans for CoP sustainability.
-

## Criteria for Research and Extension Planning Projects

### 1. Proposal Relevance (50 points):

- (a) Documented need (10 points). Application includes documentation substantiating that project is directed to current or likely future problems/challenges in specialty crop agriculture. Demonstrate specific need for planning activity (e.g., limited resources for submitting large grant applications and potential benefits accrued from formal planning activities);
- (b) Stakeholder involvement (10 points). Application includes information on how stakeholders will participate in the activity, including a listing of key participants who will be invited and their affiliations;
- (c) Outcome plan (10 points). Clear evidence of a high likelihood that quality future applications will be submitted for SCRI projects;
- (d) Systems-based approach (10 points). Application demonstrates an understanding of and proposes to develop the application of a whole system(s) approach with the potential for the project to contribute to long-term profitability and sustainability of specialty crop production, processing or marketing systems; and
- (e) Trans-disciplinary approach (10 points). Application documents that the project brings together biological, physical, and social scientists as appropriate to project goals to address economic, environmental, **and** social aspects of specialty crop sustainability.

### 2. Proposal Quality (50 points):

- (a) Conceptual adequacy and design (25 points). Application clearly states objectives and includes a preliminary agenda that addresses those objectives;
  - (b) Involvement of appropriate, relevant expertise in planning activity committees, speakers, and attendees (5 points);
  - (c) Experience of senior/key project personnel (5 points);
  - (d) Appropriateness of budget (5 points);
  - (e) Feasibility (5 points). Likelihood that the effort will result in a future grant application to the SCRI; and
  - (f) Adherence to guidelines (5 points).
-

### **C. Conflicts of Interest and Confidentiality**

During the peer evaluation process, extreme care will be taken to prevent any actual or perceived conflicts of interest that may impact review or evaluation. For the purpose of determining conflicts of interest, the academic and administrative autonomy of an institution shall be determined by reference to the current Higher Education Directory, published by Higher Education Publications, Inc., 6400 Arlington Boulevard, Suite 648, Falls Church, Virginia 22042. Phone: (703) 532-2300. Web site: <http://www.hepinc.com>.

Names of submitting institutions and individuals, as well as application content and peer evaluations, will be kept confidential, except to those involved in the review process, to the extent permitted by law. In addition, the identities of peer reviewers will remain confidential throughout the entire review process. Therefore, the names of the reviewers will not be released to applicants.

### **D. Organizational Management Information**

Specific management information relating to an applicant shall be submitted on a one time basis, with updates on an as needed basis, as part of the responsibility determination prior to the award of a grant identified under this RFA, if such information has not been provided previously under this or another NIFA program. NIFA will provide copies of forms recommended for use in fulfilling these requirements as part of the pre-award process. Although an applicant may be eligible based on its status as one of these entities, there are factors which may exclude an applicant from receiving Federal financial and nonfinancial assistance and benefits under this program (e.g., debarment or suspension of an individual involved or a determination that an applicant is not responsible based on submitted organizational management information).

## **PART VI—AWARD ADMINISTRATION**

### **A. General**

Within the limit of funds available for such purpose, the awarding official of NIFA shall make grants to those responsible, eligible applicants whose applications are judged most meritorious under the procedures set forth in this RFA. The date specified by the awarding official of NIFA as the effective date of the grant shall be no later than September 30 of the Federal fiscal year in which the project is approved for support and funds are available for such purpose, unless otherwise permitted by law. It should be noted that the project need not be initiated on the grant effective date, but as soon thereafter as practical so that project goals may be attained within the funded project period. All funds granted by NIFA under this RFA shall be expended solely for the purpose for which the funds are granted in accordance with the approved application and budget, the regulations, the terms and conditions of the award, the applicable Federal cost principles (2 CFR 215, 2 CFR 220 and 2 CFR 230), and the Department's assistance regulations (parts 3015, 3019 and 3430 of 7 CFR).

### **B. Award Notice**

The award document will provide pertinent instructions and information including, at a minimum, the following:

- (1) Legal name and address of performing organization or institution to whom the Director has issued an award under the terms of this request for applications;
- (2) Title of project;
- (3) Name(s) and institution(s) of PDs chosen to direct and control approved activities;
- (4) Identifying award number assigned by the Department;
- (5) Project period, specifying the amount of time the Department intends to support the project without requiring recompetition for funds;
- (6) Total amount of Departmental financial assistance approved by the Director during the project period;
- (7) Legal authority(ies) under which the award is issued;
- (8) Appropriate Catalog of Federal Domestic Assistance (CFDA) number;
- (9) Applicable award terms and conditions (see <http://www.nifa.usda.gov/business/awards/awardterms.html> to view NIFA award terms and conditions);
- (10) Approved budget plan for categorizing allocable project funds to accomplish the stated purpose of the award; and

(11) Other information or provisions deemed necessary by NIFA to carry out its respective awarding activities or to accomplish the purpose of a particular award.

### **C. Administrative and National Policy Requirements**

Several Federal statutes and regulations apply to grant applications considered for review and to project grants awarded under this program. These include, but are not limited to:

2 CFR Part 215 – Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations (OMB Circular A-110).

2 CFR Part 220 – Cost Principles for Educational Institutions (OMB Circular A-21).

2 CFR Part 230 – Cost Principles for Non-Profit Organizations (OMB Circular A-122).

7 CFR Part 1, subpart A—USDA implementation of the Freedom of Information Act.

7 CFR Part 3—USDA implementation of OMB Circular No. A-129 regarding debt collection.

7 CFR Part 15, subpart A—USDA implementation of Title VI of the Civil Rights Act of 1964, as amended.

7 CFR Part 331 and 9 CFR Part 121—USDA implementation of the Agricultural Bioterrorism Protection Act of 2002.

7 CFR Part 3015—USDA Uniform Federal Assistance Regulations, implementing OMB directives (i.e., OMB Circular Nos. A-21 and A-122, now codified at 2 CFR Parts 220 and 230) and incorporating provisions of 31 U.S.C. 6301-6308 (formerly the Federal Grant and Cooperative Agreement Act of 1977, Pub. L. No. 95-224), as well as general policy requirements applicable to recipients of Departmental financial assistance.

7 CFR Part 3017—USDA implementation of Government wide Debarment and Suspension (Nonprocurement).

7 CFR Part 3018—USDA implementation of Restrictions on Lobbying. Imposes prohibitions and requirements for disclosure and certification related to lobbying on recipients of Federal contracts, grants, cooperative agreements, and loans.

7 CFR Part 3019—USDA implementation of OMB Circular A-110, Uniform Administrative Requirements for Grants and Other Agreements With Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations.

7 CFR Part 3021—Governmentwide Requirements for Drug Free Workplace (Grants)

7 CFR Part 3052—USDA implementation of OMB Circular No. A-133, Audits of States, Local Governments, and Non profit Organizations.

7 CFR Part 3407—CSREES procedures to implement the National Environmental Policy Act of 1969, as amended.

7 CFR Part 3430 – CSREES Competitive and Noncompetitive Nonformula Grant Programs—General Grant Administrative Provisions, including subpart F, which specifically addresses this program.

29 U.S.C. 794 (section 504, Rehabilitation Act of 1973) and 7 CFR Part 15b (USDA implementation of statute) —prohibiting discrimination based upon physical or mental handicap in Federally assisted programs.

35 U.S.C. 200 et seq. —Bayh Dole Act, controlling allocation of rights to inventions made by employees of small business firms and domestic nonprofit organizations, including universities, in Federally assisted programs (implementing regulations are contained in 37 CFR Part 401).

#### **D. Expected Program Outputs and Reporting Requirements**

Grantees are required to submit annual and summary progress reports via NIFA's Current Research Information System (CRIS). CRIS is an electronic, Web-based inventory system that facilitates both grantee submissions of project outcomes and public access to information on Federally-funded projects (<http://cris.nifa.usda.gov/>).

## **PART VII—AGENCY CONTACT**

Applicants and other interested parties are encouraged to contact one of the program directors listed below. To help us keep complete records, we request that interested parties use email as a primary contact method.

Tom Bewick; National Program Leader; Plant and Animal Systems; National Institute of Food and Agriculture; USDA; STOP 2220; 1400 Independence Avenue, SW, Washington, DC 20250-2220; telephone: (202) 401-3356; fax: (202) 401-4888; e-mail: [tbewick@nifa.usda.gov](mailto:tbewick@nifa.usda.gov)

### **OR**

Daniel Schmoldt; National Program Leader; Plant and Animal Systems; National Institute of Food and Agriculture; USDA; STOP 2220; 1400 Independence Avenue, SW, Washington, DC 20250-2220; telephone: (202) 720-4807; fax: (202) 401-5179; e-mail: [dschmoldt@nifa.usda.gov](mailto:dschmoldt@nifa.usda.gov)

## **PART VIII—OTHER INFORMATION**

### **A. Access to Review Information**

Copies of reviews, not including the identity of reviewers, and a summary of the panel comments will be sent to the applicant PD after the review process has been completed.

### **B. Use of Funds; Changes**

#### **1. Delegation of Fiscal Responsibility**

Unless the terms and conditions of the award state otherwise, the awardee may not in whole or in part delegate or transfer to another person, institution, or organization the responsibility for use or expenditure of award funds.

#### **2. Changes in Project Plans**

a. The permissible changes by the awardee, PD(s), or other key project personnel in the approved project shall be limited to changes in methodology, techniques, or other similar aspects of the project to expedite achievement of the project's approved goals. If the awardee or the PD(s) is uncertain as to whether a change complies with this provision, the question must be referred to the Authorized Departmental Officer (ADO) for a final determination. The ADO is the signatory of the award document, not the program contact.

b. Changes in approved goals or objectives shall be requested by the awardee and approved in writing by the ADO prior to effecting such changes. In no event shall requests for such changes be approved which are outside the scope of the original approved project.

c. Changes in approved project leadership or the replacement or reassignment of other key project personnel shall be requested by the awardee and approved in writing by the ADO prior to effecting such changes.

d. Transfers of actual performance of the substantive programmatic work in whole or in part and provisions for payment of funds, whether or not Federal funds are involved, shall be requested by the awardee and approved in writing by the ADO prior to effecting such transfers, unless prescribed otherwise in the terms and conditions of the award.

e. The project period may be extended by NIFA without additional financial support, for such additional period(s) as the ADO determines may be necessary to complete or fulfill the purposes of an approved project. . Any extension of time shall be conditioned upon prior request by the awardee and approval in writing by the ADO, unless prescribed otherwise in the terms and conditions of award.

f. Changes in Approved Budget: Unless stated otherwise in the terms and conditions of award, changes in an approved budget must be requested by the awardee and approved in writing by the ADO prior to instituting such changes if the revision will involve transfers or expenditures of

amounts requiring prior approval as set forth in the applicable Federal cost principles, Departmental regulations, or award.

### **C. Confidential Aspects of Applications and Awards**

When an application results in an award, it becomes a part of the record of NIFA's transactions, available to the public upon specific request. Information that the Secretary determines to be of a confidential, privileged, or proprietary nature will be held in confidence to the extent permitted by law. Therefore, any information that the applicant wishes to have considered as confidential, privileged, or proprietary should be clearly marked within the application. The original copy of an application that does not result in an award will be retained by the Agency for a period of three years. Other copies will be destroyed. Such an application will be released only with the consent of the applicant or to the extent required by law. An application may be withdrawn at any time prior to the final action thereon.

### **D. Regulatory Information**

For the reasons set forth in the final Rule related Notice to 7 CFR part 3015, subpart V (48 FR 29114, June 24, 1983), this program is excluded from the scope of the Executive Order 12372 which requires intergovernmental consultation with State and local officials. Under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35), the collection of information requirements contained in this Notice have been approved under OMB Document No. 0524-0039.

### **E. Definitions**

Please refer to 7 CFR 3430, Competitive and Noncompetitive Non-formula Grant Programs--General Grant Administrative Provisions, for the applicable definitions for this NIFA grant program.

1862 Land-Grant Institution means an institution eligible to receive funds under the Act of July 2, 1862, as amended (7 U.S.C. 301 et seq.). Unless otherwise stated for a specific program, this term includes a research foundation maintained by such an institution.

1890 Land-Grant Institution means one of those institutions eligible to receive funds under the Act of August 30, 1890, as amended (7 U.S.C. 321 et seq.), including Tuskegee University and West Virginia State University. Unless otherwise stated for a specific program, this term includes a research foundation maintained by such an institution.

1994 Land-Grant Institution means one of those institutions as defined in section 532 of the Equity in Educational Land-Grant Status Act of 1994, as amended (7 U.S.C. 301 note). These institutions are commonly referred to as Tribal Colleges or Universities.

Advisory Board means the National Agricultural Research, Extension, Education, and Economics Advisory Board (as established under section 1408 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3123)).

Agricultural research means research in the food and agricultural sciences.

Applied research means research that includes expansion of the findings of fundamental research to uncover practical ways in which new knowledge can be advanced to benefit individuals and society.

Authorized Departmental Officer or ADO means the Secretary or any employee of the Department with delegated authority to issue or modify grant instruments on behalf of the Secretary.

Authorized Representative or AR means the President or Chief Executive Officer of the applicant organization or the official, designated by the President or Chief Executive Officer of the applicant organization, who has the authority to commit the resources of the organization to the project.

Budget period means the interval of time (usually 12 months) into which the project period is divided for budgetary and reporting purposes.

Cash contributions means the recipient's cash outlay, including the outlay of money contributed to the recipient by non-Federal third parties.

College or university means, unless defined in a separate subpart, an educational institution in any State which:

- (1) Admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate;
- (2) Is legally authorized within such State to provide a program of education beyond secondary education;
- (3) Provides an educational program for which a bachelor's degree or any other higher degree is awarded;
- (4) Is a public or other nonprofit institution; and
- (5) Is accredited by a nationally recognized accrediting agency or association. Unless otherwise stated for a specific program, this term includes a research foundation maintained by such an institution.

Continuation grant is an instrument by which NIFA agrees to support a specified level of effort for a predetermined project period with a statement of intention to provide additional support at a future date, provided that performance has been satisfactory, funds are available for this purpose, and continued support would be in the best interest of the Federal government and the public.

Department means the United States Department of Agriculture.

Director means the Director of the National Institute of Food and Agriculture (NIFA) and any other officer or employee of the NIFA to whom the authority involved is delegated.

Education activity or teaching activity means formal classroom instruction, laboratory instruction, and practicum experience in the food and agricultural sciences and other related

matters such as faculty development, student recruitment and services, curriculum development, instructional materials and equipment, and innovative teaching methodologies.

Established and demonstrated capacity means that an organization has met the following criteria:

- (1) Conducts any systematic study directed toward new or fuller knowledge and understanding of the subject studied; or,
- (2) Systematically relates or applies the findings of research or scientific experimentation to the application of new approaches to problem solving, technologies, or management practices; and
- (3) Has facilities, qualified personnel, independent funding, and prior projects and accomplishments in research or technology transfer.

Extension means informal education program conducted in the States in cooperation with the United States Department of Agriculture.

Extension activity means an act or process that delivers science-based knowledge and informal educational programs to people, enabling them to make practical decisions.

Food and agricultural sciences The term "food and agricultural sciences" means basic, applied, and developmental research, extension, and teaching activities in food and fiber, agricultural, renewable natural resources, forestry, and physical and social sciences, including activities relating to the following:

- (1) Animal health, production, and well-being.
- (2) Plant health and production.
- (3) Animal and plant germplasm collection and preservation.
- (4) Aquaculture.
- (5) Food safety.
- (6) Soil and water conservation and improvement.
- (7) Forestry, horticulture, and range management.
- (8) Nutritional sciences and promotion.
- (9) Farm enhancement, including financial management, input efficiency, and profitability.
- (10) Home economics.
- (11) Rural human ecology.
- (12) Youth development and agricultural education, including 4-H clubs.
- (13) Expansion of domestic and international markets for agricultural commodities and products, including agricultural trade barrier identification and analysis.
- (14) Information management and technology transfer related to agriculture.
- (15) Biotechnology related to agriculture.
- (16) The processing, distributing, marketing, and utilization of food and agricultural products.

Fundamental research means research that (1) increases knowledge or understanding of the fundamental aspects of phenomena and has the potential for broad application, and (2) has an effect on agriculture, food, nutrition, or the environment.

Graduate degree means a Master's or doctoral degree.

Grant means the award by the Authorized Departmental Officer of funds to an eligible grantee to assist in meeting the costs of conducting for the benefit of the public, an identified project which

is intended and designed to accomplish the purpose of the program as identified in the program solicitation or RFA.

Grantee means the organization designated in the grant award document as the responsible legal entity to which a grant is awarded.

Insular area means the Commonwealth of Puerto Rico, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, the Republic of Palau, and the Virgin Islands of the United States.

Integrated means a project that brings together at least two of the three components of the agricultural knowledge system (i.e., research, education, and extension) around a problem or issue. In general, integrated projects will be stakeholder driven, problem focused, and outcome oriented.

Land-grant Institutions means the 1862 Land-Grant Institutions, 1890 Land-Grant Institutions, and 1994 Land-Grant Institutions.

Matching or cost sharing means that portion of allowable project or program costs not borne by the Federal Government, including the value of in-kind contributions.

Merit review means an evaluation of a proposed project or elements of a proposed program whereby the technical quality and relevance to regional or national goals are assessed.

Merit reviewers means peers and other individuals with expertise appropriate to conduct merit review of a proposed project.

Methodology means the project approach to be followed.

Multifunctional research and extension activities are those in which research results are communicated via extension activities to stakeholders and the public in a coordinated manner during the life of a single project.

National laboratories include Federal laboratories that are government-owned contractor-operated or government-owned government-operated.

Organic System Plan means a plan of management of an organic production or handling operation that has been agreed to by the producer or handler and the certifying agent and that includes written plans concerning all aspects of agricultural production or handling described by the National Organic Program.

Peer reviewers means experts or consultants qualified by training and experience to give expert advice on the scientific and technical merit of grant applications or the relevance of those applications to one or more of the application evaluation criteria. Peer reviewers may be adhoc or convened as a panel.

Primary System for specialty crops refers to the total production system, the processing and distribution system, or the consumer and marketing system.

Prior approval means written approval by an Authorized Departmental Officer evidencing prior consent.

Private research organization means any non-governmental corporation, partnership, proprietorship, trust, or other organization.

Private sector means all non-public entities, including for-profit and nonprofit commercial and non-commercial entities, and including private or independent educational associations.

Program Officer means a NIFA individual who is responsible for the technical oversight of the award on behalf of USDA.

Project means the particular activity within the scope of the program supported by a grant award.

Project Director or PD means the single individual designated by the grantee in the grant application and approved by the Authorized Departmental Officer who is responsible for the direction and management of the project, also known as a Principal Investigator (PI) for research activities.

Project period means the total length of time, as stated in the award document and modifications thereto, if any, during which Federal sponsorship begins and ends.

Research means any systematic study directed toward new or fuller knowledge and understanding of the subject studied.

Scientific peer review is an evaluation of the technical quality of a proposed project and its relevance to regional or national goals, performed by experts with the scientific knowledge and technical skills to conduct the proposed research work.

Secretary means the Secretary of Agriculture and any other officer or employee of the Department to whom the authority involved is delegated.

Specialty crop means fruits and vegetables, tree nuts, dried fruits, and horticulture and nursery crops (including floriculture).

Standard grant is an instrument by which NIFA agrees to support a specified level of effort for a predetermined project period without any statement of intention to provide additional support at a future date.

State means any one of the fifty States, the District of Columbia, and the insular areas.

Systems approach is any process of estimating or inferring how local policies, actions, or changes influence the state of the neighboring universe. It is a framework that is based on the belief that the component parts of a system can best be understood in the context of relationships

with each other and with other systems, rather than in isolation. The only way to fully understand why a problem or element occurs and persists is to understand the part in relation to the whole.

Third party in-kind contributions means the value of non-cash contributions of property or services provided by non-Federal third parties, including real property, equipment, supplies and other expendable property, directly benefiting and specifically identifiable to a funded project or program.

Trans-disciplinary means a multi-discipline approach that brings biological and physical scientists together with economists and social scientists to address challenges in a holistic manner.

Under Secretary means the Under Secretary for Research, Education, and Economics.

United States means the several States, the District of Columbia, and the insular areas.

Units of State government means all State institutions, including the formal divisions of State government (i.e., the official state agencies such as departments of transportation and education), local government agencies (e.g., a county human services office), and including state educational institutions (e.g., public colleges and universities).

## F. Electronic Application Checklist

*(Disclaimer Note: This checklist is included for the sole purpose of assisting the applicant in the self review process prior to submission. Applicant should use the RFA as the instrument of instruction and the Application Guide to complete the application process. This checklist is NOT an official portion of the RFA and should in no way be considered a replacement for the Application Guide or instructions contained within the RFA.)*

Only electronic applications may be submitted to NIFA via Grants.gov unless indicated otherwise in the specific program RFA. All applications submitted to NIFA must contain the applicable elements outlined in these guidelines. The following checklist has been prepared to assist in ensuring that the application is complete prior to submission:

- Are you eligible to apply for the funding offered in the RFA?**  
Eligibility information for each funding opportunity is stated in Part III, Eligibility Information, of each RFA.
- Are you applying to the correct funding opportunity associated with the RFA?**  
Field 1 of the NIFA Supplemental Information Form will pre-populate to indicate the program to which you are applying.
- Have you followed the guidelines for filling out your electronic application provided in the NIFA Grants.gov Application Guide, which is posted along with the SF 424 R&R application package on Grants.gov?**  
Electronic applications should be prepared according to this guide and the specific program RFA. This guide is part of the corresponding electronic application package for the specific program to which you are applying.
- Has your institution properly registered with Grants.gov to enable you to submit an application?**  
Those who wish to submit an application to NIFA should first contact their Authorized Representative (AR) to determine if the organization is prepared to submit applications through Grants.gov. See [http://www.grants.gov/applicants/get\\_registered.jsp](http://www.grants.gov/applicants/get_registered.jsp) for steps to preparing to submit applications through Grants.gov.
- Have all attachments been submitted in the portable document format (PDF)?**  
NIFA will only accept PDF attachments. See Part III of the NIFA Grants.gov Application Guide.
- Do all submitted PDF documents have one-inch margins and are typed or word processed using no type smaller than 12 point regardless of line spacing? Are all PDF documents numbered sequentially on each page of the attachment? Are all page limitations for a given attachment followed?**  
Submitted proposals that do not meet these requirements for PDF attachments will be returned without review.

- Did you use the “Check Package for Errors” feature (see section 1.8 of the NIFA Grants.gov Application Guide)?**
- Have all required components of the SF 424 Research and Related (R&R) Application Package posted under the funding opportunity on Grants.gov been completed?**  
Mandatory Forms  
Optional Forms

**SF 424 R&R Cover Sheet**

- Have all required fields (highlighted in yellow) been completed?

**R&R Other Project Information**

- Have the fields describing project potential or actual environmental impact been properly completed?

**Project Summary/Abstract**

- Has the Project Summary PDF been attached to this form in Field 6?
- Are the names and affiliated organizations of all Project Directors listed at the top of the page in addition to the title of the project?
- Does this section adhere to the format and page limitations?
- Did you use the suggested Project Summary/Abstract Template found at:  
[http://www.nifa.usda.gov/home/faq\\_apply.html#abstract?](http://www.nifa.usda.gov/home/faq_apply.html#abstract?)

**Project Narrative**

- Has the Project Narrative PDF been attached to this form in Field 7?
- Is the project fully described?
- Does this section adhere to the format and page limitations?

**Bibliography & References Cited**

- Has the Bibliography & References Cited PDF been attached to this form in Field 8?
- Are all references cited and are all citations referenced?
- Do all citations contain a title, the names of all authors, and are they in accepted journal format?

**Facilities & Other Resources**

- Has the Facilities & Other Resources PDF been attached to this form in Field 9?
- Has a description of your facilities, sufficient to indicate that you will be able to carry out this project, been given?

**Equipment**

- Has the Equipment PDF been attached to this form in Field 10?
- Is the description of your equipment sufficient to indicate that you will be able to carry out this project?

**Appendices to Project Description**

- Has the Appendices to Project Description PDF been attached to this form in Field 11?

### Collaborative Arrangements

- Has the Collaborative Arrangements PDF been attached to this form in Field 11?

### Response to Previous Review (for resubmitted applications)

- Has the Response to Previous Review PDF been included as indicated in the RFA?
- Has the application been clearly and meaningfully revised and are the revisions briefly described?
- Are comments from the previous review addressed?

### **R&R Senior/Key Person Profile**

#### Biographical Sketch

- Has the biographical sketch (vitae) PDF for the PD and each co-PD, senior associate, and other professional personnel been attached?

#### Current and Pending Support

- Has the current and pending support PDF for key personnel been attached?
- Have all current and pending projects been listed and summarized, **including this proposal?**
- Did you use the suggested Current and Pending Support Template found at: [http://www.nifa.usda.gov/home/faq\\_apply.html#current?](http://www.nifa.usda.gov/home/faq_apply.html#current?)

### **R&R Personal Data**

- Have all fields been completed, except social security number?

### **R&R Budget**

- Have all fields been completed for each PD and co-PD(s)?
- Are annual and summary budgets included? For multi-institution applications, has a subaward budget been included for each institution involved?

#### Budget Justification

- Has the Budget Justification PDF been attached to this form in Field K?
- Are budget items individually justified?
- For multi-institutional applications, has a subaward budget justification been included for each institution involved?
- Have matching requirements been addressed?

**SPECIAL NOTE: 100 percent non-federal match is legislatively required for this funding opportunity. ALL applicants will be required to provide appropriate matching documentation. See Part IV(B)(6) of this RFA for further details and specific instructions.**

### **NIFA Supplemental Information Form**

- Has Filed 1 been pre-populated?

- Does Field 2 indicate the Program Code Name and Program Code to which you are applying?

Conflict of Interest List

- Has the Conflict of Interest List PDF been attached to this form in Field 8?
- Has a Conflict of Interest List been provided for all individuals who have submitted a Biographical Sketch?
- Did you use the suggested Conflict of Interest Template found at:  
[http://www.nifa.usda.gov/home/faq\\_apply.html#coi?](http://www.nifa.usda.gov/home/faq_apply.html#coi?)
- Does the Conflict of Interest list include the four categories as appropriate?