

Special Research Grants Program Potato Breeding Research

FY2017 Request for Applications (RFA)

APPLICATION DEADLINE: March 10, 2017

ELIGIBILITY: See Part III, A of RFA



United States
Department of
Agriculture

National Institute
of Food and
Agriculture

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

INITIAL ANNOUNCEMENT

CATALOG OF FEDERAL DOMESTIC ASSISTANCE: This program is listed in the Catalog of Federal Domestic Assistance under 10.200.

DATES: Applications must be received by **5 p.m. Eastern Time on March 10, 2017**. Applications received after this deadline will normally not be considered for funding (see Part IV, C of this RFA). 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: We at the National Institute of Food and Agriculture (NIFA) seek your comments about this RFA. We will consider your comments when we develop the next RFA for the program, if applicable, and we'll use them 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)). Submit your written stakeholder comments by the deadline set forth in the DATES portion of this notice via email to Policy@nifa.usda.gov. (This email address is only for receiving comments regarding this RFA and *not* for requesting information or forms.) In your comments, please state that you are responding to the Special Research Grants Program, Potato Breeding Research RFA.

EXECUTIVE SUMMARY: NIFA requests applications for the Special Research Grants Program, Potato Breeding Research for fiscal year (FY) 2017 to support research that leads to the development and commercial use of superior potato varieties that address significant challenges to the U.S. potato industry. The anticipated amount available for grants in FY2017 is approximately \$1.85 million. This RFA is being released prior to the passage of an appropriations act for FY2017. Enactment of additional continuing resolutions or an appropriations act may affect the availability of funds or level of funding for this program.

This notice identifies the objectives for Special Research Grants Program, Potato Breeding Research projects, deadline dates, funding information, eligibility criteria for projects and applicants, and application forms and associated instructions needed to apply for a Potato Breeding Research grant.

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PART I—FUNDING OPPORTUNITY DESCRIPTION

A. Legislative Authority and Background

The authority for this program is contained in subsection (c)(1)(B) of section 2 of the Competitive, Special, and Facilities Research Grant Act, Pub. L. No. 89-106, as amended (7 USC 450i(c)(1)(B)).

In accordance with the statutory authority, grants awarded under this program will be for the purpose of facilitating or expanding ongoing State-Federal food and agricultural research programs that promote: (i) Excellence in research on a regional and national level; (ii) Development of regional research centers; (iii) Research partnership between the Department of Agriculture, colleges and universities, research foundations, and State Agricultural Experiment Stations for regional research efforts; and (iv) Coordination and cooperation of research among states through regional research grants.

B. Purpose and Priorities

This grant program supports potato (*Solanum tuberosum* L.) research that focuses on the development and testing of superior commercial potato varieties using classical breeding and advanced molecular and biotechnological approaches, and high-throughput methods that address significant or emergent issues of importance to the U.S. potato industry. Aspects of evaluation, screening, and testing must support commercial variety development and transfer of superior materials to users as soon as possible.

The Potato Breeding Research program aligns with the USDA Strategic Plan (<http://www.ocfo.usda.gov/usdasp/sp2014/usda-strategic-plan-fy-2014-2018.pdf>), and specifically addresses; Strategic Goal 3, Help America Promote Agricultural Production and Biotechnology Exports as America Works to Increase Food Security; Objective 3.1, Ensure U.S. Agricultural Resources Contribute to Enhanced Global Security.

The Potato Breeding Research program directly aligns with the USDA Research, Education, and Economics Action Plan (http://www.ree.usda.gov/ree/news/USDA_REE_Action_Plan_03-2014.pdf) and specifically addresses the following goals:

- Goal 1 – Sustainable Intensification of Agricultural Production, Subgoals 1A, 1B, and 1C (which focus on Crop Production, Health, Genetics, Genomics, Genetic Resources, and Biotechnology);
- Goal 2 – Responding to Climate and Energy Needs, Subgoal 2A. Responding to Climate Variability; and
- Goal 4 - Nutrition and Childhood Obesity.

The Potato Breeding Research program is aligned with the NIFA Strategic plan (http://nifa.usda.gov/about/pdfs/strat_plan_2014.pdf), and specifically addresses Strategic Goal 1 (Science) by advancing our Nation's ability to achieve global food security and fight hunger (Subgoal 1.1).

C. Program Area Description

The Potato Breeding Research program will fund projects that have great potential for producing new potato varieties with a high value to the commercial U.S. potato industry. The Potato Breeding Research program encourages applicants to establish regional, multi-location, research networks to address priority national or regional science needs of the potato industry. By bringing together expertise across multiple university, federal agency, and industry organizations and states, the Potato Breeding Research program seeks to enhance the effectiveness of limited state, federal, and industry resources and accelerate the development of superior varieties that produce greater benefits to the potato industry.

NIFA is soliciting applications for FY2017 Potato Breeding Research program that address one or more of the following research areas that will produce outcomes important to the U.S. potato industry:

1. Superior performing varieties developed with resistance to established and emerging pests and diseases including but not limited to potato virus Y, damaging nematodes, the late and early blight pathogen, white mold, powdery scab, storage rot diseases, PMTV, and *Dickeya* that limit sustained production, profitability, and market competitiveness;
2. Improved water and nutrient use efficiency traits for varieties that result in decreased demand for irrigation and fertilizer applications, while maintaining desired yield and quality;
3. Desirable yield, storability, consumer, and other value-added quality traits are identified and developed for use in new potato varieties; or
4. High throughput methods developed for rapidly selecting traits, specifically for developing new superior-performing varieties and bringing them to market as soon as possible.

New requirement in 2017: Applicants will submit a two-year work plan with a two-year budget, but only the first year of funding will be awarded in the first year. Funding for the second year of the two-year work plan will be awarded after a continuation request is submitted, and with appropriate reported progress for the first year. Second year funding is dependent on the FY 18 annual appropriations.

Applicants are encouraged to provide evidence of qualified staff, suitable equipment, and facilities; capacity to lead a multi-institutional, multi-state approach that involves potato growers and other industry partners; linkages among university, federal agency, and other researchers; and evidence of stakeholder participation in the development of research priorities and project objectives.

A detailed plan and schedule for Extension and other engagement activities that support earliest-possible adoption for commercial use of new varieties, practices, or other technologies and information developed should include formal or informal educational programs such as workshops, field days, and other extension, outreach, and engagement activities, as well as published documents including bulletins, extension guides, germplasm or variety releases, licensing agreements, or on-line media.

New requirement in 2017: Applicants are expected to report information regarding the readiness status of new traits, advanced lines, and varieties developed through this program for use by breeders, potato seed certifying agencies or distributors, growers, processors, or other production system or end-product supply chain participants. As applicable, the present status of information or new technology components towards the market place at the beginning of the project and the expected advancement by the end of the project should be reported as measured by the technology readiness level (TRL). See TRL at: http://www.nasa.gov/pdf/458490main_TRL_Definitions.pdf.

Applications must provide a description and budgeted plan for releasing research data, germplasm, cultivars, or other genetic resources that is compliant with the [Research Terms and Conditions](#) that govern NIFA-funded projects in the areas of plant breeding, genetics and genomics. The terms and conditions can be found at: www.nsf.gov/pubs/policydocs/rtc/agencyspecifics/nifa_1014.pdf. The following sections are particularly relevant: Genetic Resources from Outside of the U.S (page 5); Patents and Inventions including Plant Variety Protection (pages 6-8); and Release of Animal or Plant Genome Sequence Data and Distribution of Animal or Plant Genomic Resources, and the Release or Distribution of Plant Germplasm (pages 10-12).

Examples of previously funded projects by the Potato Breeding Research program can be found on the NIFA Current Research Information System (CRIS): <http://cris.csrees.usda.gov/cgi-bin/starfinder/0?path=fastlink1.txt&id=anon&pass=&search=gc=an%20AND%20gy%3E2002&format=WEBTITLESG>.

The Potato Breeding Research program encourages (but does not require) projects that develop content suitable for delivery through eXtension (<https://extension.org/>). This content is for “end users” as opposed to staff development and must align with the eXtension principles, implementation plan, and other requirements presented at <https://extension.org/about/>. Funds may be used to contribute to an existing Community of Practice or to form a new Community of Practice as appropriate.

Project Director Meeting: It is the intent of the Potato Breeding Research Program to require successful applicants to attend one project director (PD) meeting during each year of the project. The PD meeting may be held in Washington, DC in conjunction with other related grant programs, professional meetings, or potato industry board meetings. For budget development purposes, applicants are required to request funds to attend such a meeting (see Part IV B, 6.)

PART II—AWARD INFORMATION

A. Available Funding

The anticipated total amount available for the Potato Breeding Research Program grant in FY2017 is approximately \$1.85 million. This RFA is being released prior to the passage of an appropriations act for FY2017. Enactment of additional continuing resolutions or an appropriations act may affect the availability of funds or level of funding for this program. There is no commitment by USDA to fund any particular application or to make a specific number of awards.

The Automated Standard Applications for Payment System (ASAP), operated by the Department of Treasury's Bureau of the Fiscal Service, is the designated payment system for awards resulting from this RFA. For more information see https://www.fiscal.treasury.gov/fsservices/gov/pmt/asap/asap_home.htm.

B. Types of Applications

In FY2017, applications to the Potato Breeding Research Program may be submitted as one of the following four types of requests:

- (1) New application.** This is a project application that has not been previously submitted to the Potato Breeding Research Program. We will review all new applications competitively using the selection process and evaluation criteria described in Part V—Application Review Requirements.
- (2) Renewal application.** This is a project application that requests 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; they also must contain a Progress Report (see Project Narrative, Part IV). Renewal applications must be received by the relevant due dates, will be evaluated in competition with other pending applications in the area to which they are assigned, and will be reviewed according to the same evaluation criteria as new applications.

C. Project Types

****New in 2017****

Only research projects that address potato breeding to improve potato varieties, their adoption, and use for commercial production will be considered. Each special research proposal will be submitted for a TWO-YEAR WORK PLAN WITH TWO-YEAR BUDGET, but only the first year of funding will be awarded in the first year. FY2017 awardees will need to submit a continuation request, and with appropriate reported progress for the first year, funding for the second year of the two-year work plan will be awarded. Second year funding is dependent on the FY2018 annual appropriations.

D. Scientific Peer Review

Subsection (c)(5) of the Competitive, Special, and Facilities Research Grant Act, as amended (7 U.S.C. 450i(c)(5)) requires applicants to conduct scientific peer review of their proposed research activities in accordance with regulations promulgated by the Secretary prior to the Secretary making a grant award under this authority. Regulations implementing this requirement are set forth in 7 CFR Part 3400.20. The regulations impose the following requirements:

1) Scientific peer review: Prior to the award of a standard or continuation grant, any proposed research project shall have undergone a review arranged by the grantee. Such review must be a scientific peer review conducted in accordance with 7 CFR 3400.21. Scientific peer review is an evaluation of a proposed project for technical quality and relevance to regional or national goals performed by experts with the scientific knowledge and technical skills to conduct the proposed research work. It must be credible, independent, and arranged by the grantee. Often this review is conducted by faculty peers. It may include USDA employees, but should not be conducted solely by USDA employees. Although evidence of a scientific peer review is not required until an award is ready to be finalized, peer reviews can improve the quality of a proposal. We thus encourage applicants to have proposals peer reviewed before submission.

(2) Notice of completion and retention of records: A notice of completion of the review shall be conveyed in writing to NIFA as part of the Other Attachments (Field 12. of the R&R Other Project Information Form). The written notice constitutes certification by the applicant that a review in compliance with these regulations has occurred. Applicants are not required to submit results of the review to NIFA; however, proper documentation of the review process and results should be retained by the applicant. The notice should state: “In accordance with 7 CFR 3400.21, this memo is to certify that this project [title] has undergone a scientific peer review.” If this notification is included within the application, a signature is not necessary. If, however, it is submitted to NIFA after the application is submitted through Grants.gov, the memo must be on the institution’s letterhead and signed by the Authorized Representative.

E. Responsible and Ethical Conduct of Research

In accordance with sections 2, 3, and 8 of 2 CFR Part 422, institutions that conduct USDA-funded extramural research must foster an atmosphere conducive to research integrity, bear primary responsibility for prevention and detection of research misconduct, and maintain and effectively communicate and train their staff regarding policies and procedures. In the event an application to NIFA results in an award, the Authorized Representative (AR) assures, through acceptance of the award that the institution will comply with the above requirements. Award recipients shall, upon request, make available to NIFA the policies, procedures, and documentation to support the conduct of the training. See <http://nifa.usda.gov/responsible-and-ethical-conduct-research> for more information.

PART III—ELIGIBILITY INFORMATION

A. Eligible Applicants

Applications may only be submitted by State agricultural experiment stations, land-grant colleges and universities, research foundations established by land-grant colleges and universities, colleges and universities receiving funds under the Act of October 10, 1962, as amended (16 USC 582a et seq.), and accredited schools or colleges of veterinary medicine. Award recipients may subcontract to organizations not eligible to apply provided such organizations are necessary for the conduct of the project. Failure to meet an eligibility criterion by the time of application deadline may result in the application being excluded from consideration or, even though an application may be reviewed, will preclude NIFA from making an award.

B. Cost Sharing or Matching

In accordance with section 1492 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3371), as added by section 7128 of the Agricultural Act of 2014 (Pub. L. 113-79), for grants awarded after October 1, 2014, the recipient of an award from the Potato Breeding Research program must provide funds, in-kind contributions, or a combination of both, from sources other than funds provided through such grant in an amount that is at least equal to the amount awarded by NIFA. The matching funds requirement does not apply to grants awarded:

1. To a research agency of the United States Department of Agriculture (USDA); or
2. To an entity eligible to receive funds under a capacity and infrastructure program (as defined in section 251(f)(1)(C) of the Department of Agriculture Reorganization Act of 1994, 7 U.S.C. 6971(f)(1)(C)), including a partner (see Part VIII, E. Definitions for definition of partnership) of such an entity.

Entities eligible to receive funds under a capacity and infrastructure program and exempt from the matching funds requirement include:

- a) 1862 Land-grant Institutions, including State Agricultural Experiment Stations receiving funding under the Hatch Act of 1887
- b) 1890 Land-grant Institutions
- c) 1994 Land-grant Institutions
- d) Recipients of Continuing Animal Health and Disease, Food Security, and Stewardship Research, Education, and Extension Program Funds — Capacity and Infrastructure Program (CIP)
- e) Hispanic-Serving Agricultural Colleges and Universities (HSACU)
- f) Insular Area Schools Eligible to Receive Funds from the Distance Education/Resident Instruction Grant Programs
- g) Recipients of McIntire-Stennis Cooperative Forestry Program Funds

- h) Non-Land Grant Colleges of Agriculture (NLGCA) - (for exemption from the new matching requirement, these applications must include NLGCA certification, see instructions for requesting certification at <http://www.nifa.usda.gov/form/form.html>, and for attaching the certification in Part IV, C. of this RFA)
- i) Recipients of funds under a program established under section 1417(b) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3152(b)), including: (1) 1890 Institution Teaching, Research, and Extension Capacity Building Grants Program; (2) Higher Education Challenge Grants Program; (3) Higher Education Multicultural Scholars Program; and (4) Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship Grants Program
- j) Individual public or private, nonprofit Alaska Native-Serving and Native Hawaiian-Serving Institutions of higher education (see 20 U.S.C. 1059d).

A proposal submitted in response to this RFA may indicate that the work will be completed by multiple entities as a collaborative partnership. All partners must have a substantial involvement in the project throughout the life of the project. If a partnership among multiple entities is proposed, the proposal must clearly identify the following:

- 1) A narrative of each entity's clearly established role in the project;
- 2) How each entity involved as a partner on the project will contribute to the execution of project objectives, determination of experimental design, development of the project work plan and time table, and submission of collaborative, timely reports; and
- 3) A comprehensive project budget that reflects each entity's financial or third party in-kind contribution (see section 2 of 7 CFR 3430 or section 96 of 2 CFR part 200) to the total project budget costs.

If a proposal indicates that the work on the project will be completed by multiple entities as partners, and at least one entity is exempt from the matching requirement under #2 above, the entire project will be exempt from the matching requirement regardless of whether all entities involved are otherwise exempt. Any partner entity can serve as the lead entity on the project. All partners must be significantly involved in the project.

After proposals have been recommended for an award, NIFA will determine if the submitted proposal and proposed division of work reflects substantial involvement of all entities involved. If a proposal is recommended for award to a lead entity not otherwise exempt from the matching requirement and the proposal does not reflect substantial involvement of at least one partner that is exempt under #2 above, then the matching requirement will apply. Exemption from the matching requirement for an entity not otherwise exempt is limited to the project for which it is a partner.

Waiver of Match - NIFA may waive the matching funds requirement for a recipient for one year with respect to a competitive grant that involves research or extension activities that are consistent with the priorities established by the National Agricultural Research, Education, Extension and Economics Advisory Board for the year involved. To determine whether proposed activities are consistent with the priorities of the NAREEEAB, please refer to the 2014 Research, Education and Economics Action Plan. Instructions for requesting a waiver are included in Part IV, C. of this RFA.

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. We urge you to submit early to the Grants.gov system. For information about the pre-award phase of the grant lifecycle see <http://www.grants.gov/web/grants/learn-grants/grants-101/pre-award-phase.html>.

New Users of Grants.gov

Prior to preparing an application, we recommend that the Project Director/Principal Investigator (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 Grants.gov. If not (e.g., the institution/organization is new to the electronic grant application process through Grants.gov), then the one-time registration process must be completed PRIOR to submitting an application. It can take as long as two weeks to complete the registration process so it is critical to begin as soon as possible. In such situations, the AR should go to **“Register,” in the top right corner of the Grants.gov web page (or go to <http://www.grants.gov/web/grants/register.html>), for information on registering the institution/organization with Grants.gov.** Part II,1 of the NIFA Grants.gov Application Guide contains detailed information regarding the registration process. Refer to item 2, below, to locate the “NIFA Grants.gov Application Guide.”

Steps to Obtain Application Package Materials

To receive application materials:

1. You must download and install a version of [Adobe Reader](#) compatible with Grants.gov to access, complete, and submit applications. For basic system requirements and download instructions, see <http://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html>. Grants.gov has a test package that will help you determine whether your current version of Adobe Reader is compatible.
2. To obtain the application package from Grants.gov, go to <http://www.grants.gov/web/grants/applicants/download-application-package.html> and enter the funding opportunity number

Funding Opportunity Number: USDA-NIFA-SRGP-006204

From the search result, click “Select Package” to access the application package. A Grant Application Package is tied to a particular funding opportunity. You may submit an application ONLY to the particular funding opportunity to which the Grant Application Package is associated.

Contained within the application package is the “NIFA Grants.gov Application Guide.” 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 you require assistance to access the application package (e.g., downloading or navigating Adobe forms) **or submitting the application**, refer to resources available on the Grants.gov website (<http://www.grants.gov/web/grants/applicants/applicant-tools-and-tips.html>). Grants.gov assistance is also available at:

Grants.gov customer support

800-518-4726 Toll-Free or 606-545-5035

Business Hours: 24 hours a day, 7 days a week. Closed on [federal holidays](#).

Email: support@grants.gov

Grants.gov iPortal (see <https://grants-portal.psc.gov/Welcome.aspx?pt=Grants>):

Top 10 requested help topics (FAQs), Searchable knowledge base, self-service ticketing and ticket status, and live web chat (available 7 a.m. - 9 p.m. EST).

Have the following information available when contacting Grants.gov:

- Funding Opportunity Number (FON)
- Name of agency you are applying to
- Specific area of concern

B. Content and Form of Application Submission

You should prepare electronic applications following Parts V and VI of the NIFA Grants.gov Application Guide. This guide is part of the corresponding application package (see Section A of this part). The following is **additional information** you need 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., PDF) in Part III, Section 3 of the guide. ANY PROPOSALS THAT ARE NON-COMPLIANT WITH THE REQUIREMENTS (e.g., content format, PDF file format, file name restrictions, and no password protected files) WILL BE AT RISK OF BEING EXCLUDED FROM NIFA REVIEW. Grants.gov does not check for NIFA required attachments or whether attachments are in PDF format; see Part III, Section 6.1 of the guide for how to check the manifest of submitted files. Partial applications will be excluded from NIFA review. We will accept subsequent submissions of an application until close of business on the closing date in the RFA (see Part V, 2.1 of the NIFA Grants.gov Application Guide for further information).

For any questions related to the preparation of an application, review the NIFA Grants.gov Application Guide and the applicable RFA. If assistance is still needed for preparing application forms content, contact:

- Email: electronic@nifa.usda.gov
- Phone: 202-401-5048
- Business hours: Monday through Friday, 7 a.m. – 5 p.m. EST, excluding [federal holidays](#).

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. See Part V, Section 2.18 of the NIFA Grants.gov Application Guide for the required certifications and assurances (e.g., Prohibition Against Entities Requiring Certain Internal Confidentiality Agreements).

2. SF 424 R&R Project/Performance Site Location(s)

Detailed information related to the questions on this form is available in Part V, 3 of the NIFA Grants.gov Application Guide.

3. R&R Other Project Information Form

Detailed information related to the questions on this form is available in Part V, 4 of the NIFA Grants.gov Application Guide.

a. Field 7. Project Summary/Abstract.

The summary should also include the relevance of the project to the goals of Potato Breeding Research Program. See Part V. 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to a suggested template.

b. Field 8. Project Narrative.

NOTE: The Project Narrative shall not exceed 18 pages of written text, regardless of whether it is single- or double-spaced, and up to three additional pages for figures and tables. We have established this maximum (18 pages) to ensure fair and equitable competition.

The Project Narrative must include all of the following:

- i) Introduction. Clearly state the high priority need of the potato industry, and the goals of the research. Summarize the relevant body of knowledge or other past activities related to your proposed research citing the work of key project personnel or others to the project. Preliminary data or information pertinent to the proposed research should be included in this section. Describe the qualifications of key personnel, adequacy of facilities, and the project management capability of the applicant institution.
- ii) Rationale and Significance. Concisely present the rationale behind the proposed research as it relates to potato and the potato industry.
 - a. The priority-setting process and method of engaging stakeholder involvement in problem identification, planning, implementation of the research, evaluation, and utilization of results and products.
 - b. The application of your research to the long-range enhancement of the potato industry and U.S. agriculture.
 - c. Describe any coordination of the research in national or regional efforts, and how this research complements other work conducted by other land-grant and other universities, Federal agencies, and industry.
 - d. Discuss novel ideas or contributions that the proposed project offers.
- iii) Objectives: Include a list of project objectives.

- iv) Expected outcomes and benefit. Projects must include a clear description of expected accomplishments; the resulting potential benefits to the potato industry (specify which segments); and how the research's progress and benefits (outputs and outcomes) will be tracked and measured. This section can include:
 - a. Anticipated specific uses and users of new genetic materials or other products.
 - b. Specific changes in knowledge about potato and its performance that will directly result from your research. Also, present status and expected advancement to the market place of new plant materials, information, or other technology components measured as technology readiness level (TRL).
 - c. Performance measures such as number of acres planted to a new potato variety, increased potato sales, relative changes in land use or production efficiencies, or changes in market share.
 - d. Estimated increases in profit or risk reductions when growing potato, or other quantitative measures of changes for other supply chain participants or consumers.

- v) Approach. Describe how you will address each stated objective. Include in your approach:
 - a. Methods to be used in carrying out the research components.
 - b. Means by which results will be analyzed, assessed, and interpreted.
 - c. A detailed description of how you will communicate your findings and transfer your genetic materials and relevant information to specific, intended users.
 - d. A clear description of each team member's role and responsibility to the project.
 - e. For the entire project, a timeline that outlines all important phases as a year-by-year function of time, including periods beyond the grant funding period.

- vi) New Requirement in 2017: Response to a Previous Review. This is required for all applications previously submitted to the Special Research Grants Program, Potato Breeding Research Program. Project directors (PDs) must respond to the previous review panel summary on no more than one page. Title as "Response to Previous Review" and include as the first page of the Project Narrative. Please include previous proposal number. The one-page response does not count against the 18-page limit of the Project Narrative.

- vii) New Requirement in 2017: Logic model. Projects must include logic model describing the activities, outputs, and outcomes of the proposed work. A logic model helps the team stay on track and revisit the long-term project goals. More information on resources related logic model is provided at <https://nifa.usda.gov/resource/logic-model-planning-process>.

- **NOTE:** Appendices to the Project Narrative are allowed if they are directly germane to the proposed project. Do not add appendices to circumvent the page limit.

c. Field 12. Add Other Attachments

1. Collaborative Arrangements: If it will be necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. If the consultants or collaborators are known at the time of application, a vitae or resume should be provided. In addition, evidence (e.g., signed letter of support) should be provided that the collaborators involved have agreed to render these services. Letters of collaboration must be signed by the respective ARs for both the applicant and the collaborator. The applicant also will be required to provide additional information on consultants and collaborators in the budget portion of the application, such as rate of pay.
2. Scientific Peer Review Certification Documentation. Notice that the scientific peer review has been completed should be included in the application (see Part II, D. item 2.).
3. See Part V. Section 4.12 of the NIFA Grants.gov Application Guide (Field 12 on the form) for instructions regarding mandatory Felony Convictions or Tax Delinquent Status.
4. **Non-Land Grant College of Agriculture (NLGCA) Certification.** Applicants claiming exemption from the new matching requirements as NLGCA, must attach the NLGCA certification letter they requested and received from NIFA. Title the attachment ‘NLGCA Certification’ and save file as ‘NLGCA Certification’. To request certification as an NLGCA, complete the form at <https://nifa.usda.gov/webform/request-non-land-grant-college-agriculture-designation>. Note that certification can take 14 up to 30 days from submission of request form. **See Part III Section 3.1 of the NIFA Grants.gov Application Guide for NIFA attachment specifications.**

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

Detailed information related to the questions on this form is available in Part V, 5 of the NIFA Grants.gov Application Guide. This section of the guide includes instructions about senior/key person profile requirements, and details about the biographical sketch and the current and pending support, including a link to a suggested template for the current and pending support.

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. Part V.6 also notes the importance and use of the information.

6. R&R Budget

Detailed information related to the questions on this form is available in Part V, 7 of the NIFA Grants.gov Application Guide.

Matching: For grants that require matching funds as specified under Part III, B., the Budget Narrative should include written verification of commitments of matching support (including both cash and in-kind contributions) from third parties. Written verification means:

- (a) For any third party cash contributions, a separate pledge agreement for each donation, signed by the authorized representatives of the donor organization (and the applicant organization ONLY if provided after submission of the application), must include: (1) The donor's name, address, and telephone number; (2) the name of the applicant organization; (3) the title of the project; (4) the dollar amount of the cash donation (the budget narrative must describe how the cash donation will be used); (5) a statement that the donor will pay the cash contribution during the grant period; and (6) whether the applicant can designate cash as the applicant deems necessary or the cash contribution has been designated to a particular budget item.

- (b) For any third party in-kind contributions, a separate pledge agreement for each contribution, signed by the authorized representatives of the donor organization (and the applicant organization ONLY if provided after submission of the application), must include: (1) The donor's name, address, and telephone number; (2) the name of the applicant organization; (3) the title of the project; (4) a good faith estimate of the current fair market value of the third party in-kind contribution and a description of how the fair market value was determined; and (5) a statement that the donor will make the contribution during the grant period.

Summarize on a separate page the sources and amount of all matching support from outside the applicant institution and place that information in the proposal as part of the Budget Narrative. You must place all pledge agreements in the proposal immediately following the summary of matching support.

Project Director Meeting:

It is the intent of the Potato Breeding Research Program to require the awardee or designee to attend one project director meeting during each year of the term of their project. For the purposes of budget development, applicants are required to request funds for travel for attending such a meeting. The request for these funds should be clearly indicated in the budget narrative section of the application.

Indirect Costs. For further information and instructions regarding indirect costs, refer to Part V, section 7.9 of the NIFA Grants.gov Application Guide. For indirect cost funding restrictions, refer to Part IV, D. of this RFA.

7. Supplemental Information Form

Detailed information related to the questions on this form is available in Part VI, 1 of the NIFA Grants.gov Application Guide.

- a. Field 2. Program to which you are applying.** Enter the program code name (i.e., enter “Potato Breeding Research”) and the program code (i.e., enter “AN”). Note that accurate entry of the program code is very important for proper and timely processing of an application.
- b. Field 8. Conflict of Interest List.** See Part VI, 1.8 of the NIFA Grants.gov Application Guide for further instructions and a link to a suggested template.

C. Submission Dates and Times

We recommend that you conduct an administrative review of the application before submission of it via Grants.gov to ensure that it complies with all preparation instructions. An application checklist is included in Part VII of the NIFA Grants.gov Application Guide to assist with this review. The Potato Breeding Research program also has unique requirements: (i) inclusion of a project logic model, (ii) present status and expected advancement assessment of information or technology components towards the market place measured as technology readiness level (TRL), and (iii) response to previous review panel comments. Applicants should ensure that all required components are included.

While the checklist should be used to check the application for completeness, the application should be checked for the following required item(s). This is not an exhaustive list of required items; it only serves to highlight items that may be overlooked. The list includes:

- Response to previous review
- Logic Model
- TRL description of information and technology advancement
- TWO year budget and associated narrative
- Management Plan
- Current and Pending Support
- Signed Tax and Felony Certification Form

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

Applications must be received by Grants.gov by **5 p.m. Eastern Time on March 10, 2017**. Applications received after this deadline will normally not be considered for funding.

If you have trouble submitting an application to Grants.gov, you should FIRST contact the Grants.gov Help Desk to resolve any problems. Keep a record of any such correspondence. See Part IV. A for Grants.gov contact information.

We send email correspondence to the AR regarding the status of submitted applications. We strongly encourage you to provide accurate email 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 established deadline, contact the Agency Contact identified in Part VII of the 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, you should cite this number on all future correspondence.**

D. Funding Restrictions

Pursuant to Section 1473 of the National Agriculture Research, Extension, and Teaching Policy Act of 1977, as amended, 7 USC 3319, indirect costs and tuition remission are not allowable costs under section 2(c)(1)(B) projects, and no funds will be approved for this purpose. Further, costs that are a part of an institution's indirect cost pool (e.g., administrative or clerical salaries) may not be reclassified as direct costs for the purpose of making them allowable.

NIFA has determined that grant funds awarded under this authority may not be used for the renovation or refurbishment of research, education, or extension space; the purchase or installation of fixed equipment in such space; or the planning, repair, rehabilitation, acquisition, or construction of buildings or facilities.

Any costs being charged to this award must be incurred within the project period.

If a project is selected for funding, additional information may be requested from the applicant.

E. Other Submission Requirements

You should follow the submission requirements noted in Part IV, Section 1.9 in the document entitled “NIFA Grants.gov Application Guide.”

For information about the **status of a submitted application**, see Part III, Section 6 of the NIFA Grants.gov Application Guide.

PART V—APPLICATION REVIEW REQUIREMENTS

A. General

We evaluate each application in a two-part process. First, we screen each application to ensure that it meets the administrative requirements as set forth in this RFA. Second, a technical review panel will evaluate applications that meet the administrative requirements.

We select reviewers based upon their training and experience in relevant scientific, extension, or education fields, taking into account the following factors:

- 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;
- Need to include experts from various areas of specialization within relevant scientific, education, or extension fields;
- Need to include other experts (e.g., producers, resource conservation managers, shippers, wholesalers, and consumers) who can assess relevance of the applications to targeted audiences and to program needs;
- Need to include experts from a variety of organizational types (e.g., colleges, universities, industry, state and federal agencies, and private profit and non-profit organizations) and geographic locations;
- Need to maintain a balanced composition with regard to minority and female representation and an equitable age distribution; and
- Need to include reviewers who can judge the effective usefulness of each application to producers and other potato production and supply chain participants, as well as consumers and the general public.

After each peer review panel has completed its deliberations, the responsible program staff of the Potato Breeding Research Program will recommend that your project be approved for support from currently available funds or be declined due to insufficient funds or unfavorable review.

The Potato Breeding Research Program reserves the right to negotiate with the PD/PI and/or with the submitting organization or institution regarding project revisions (e.g., reductions in the scope of work, funding level, period, or method of support) prior to recommending any project for funding.

We will send copies of reviews, *not* including the identity of reviewers, and a summary of the panel comments to the PD after the review process has been completed.

B. Evaluation Criteria

We will use the evaluation criteria below to review the extent to which applications submitted in response to this RFA satisfy the following criteria:

1. Conceptual adequacy (20 points). Application clearly states the potato research area(s) to be addressed, and the specified objectives are relevant and potentially attainable within project time, scope, and budget.
2. Design (40 points). The application's methodologies and analytical approaches are appropriate to project objectives. The application demonstrates understanding of a whole system(s) approach, and discusses how the project will contribute to a part or the whole of a potato production and supply chain problem. Even if a single component is the focus of the project, the proposal must provide a thorough analysis of the broader production system, supply chain, and market context for why that component is critical.
3. Involvement of relevant expertise and appropriate use of a regional and interdisciplinary approach (10 points). Application documents the bringing together of needed expertise in biological sciences, physical sciences and engineering, socio-economic sciences, extension, and program evaluation, as well as participation from principal stakeholders and partners. Project goals should address ways to increase the productivity and profitability of the U.S. potato industry.
4. Outreach plan (15 points). Application includes a detailed Extension and other engagement plan and schedule for how new genetic materials, information or knowledge, or other relevant technologies will be delivered to those specific users served by the project. A description of how impacts will be measured and reported is included.
5. Overall feasibility (10 points). The likelihood that the project will help advance the use of improved potato varieties grown in the U.S.
6. Appropriateness of budget (5 points). Budget allocations should reflect the personnel and tasks associated with the activities needed to accomplish your objectives. In the budget plan, describe how this program's funding complements other funding sources including Federal capacity and competitive funds, and state, industry, and other kinds of support.

C. Conflicts of Interest and Confidentiality

During the peer evaluation process, we take extreme care to prevent any actual or perceived conflicts of interest that may impact review or evaluation. See http://www.nifa.usda.gov/business/competitive_peer_review.html for further information about conflicts of interest and confidentiality as related to the peer review process.

D. Organizational Management Information

Specific management information relating to an applicant shall be submitted one-time, with updates on an as-needed basis. This requirement is part of the responsibility determined 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. We will provide you 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 that 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).

E. Application Disposition

An application may be withdrawn at any time before a final funding decision is made regarding the application. Each application that is not selected for funding, including those that are withdrawn, will be retained by Potato Breeding Research Program for a period of three years.

PART VI—AWARD ADMINISTRATION

A. General

Within the limit of funds available for such purpose, the NIFA awarding official 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 NIFA awarding official 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 appropriated for such purpose, unless otherwise permitted by law. 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 may be used only for the purpose for which they are granted in accordance with the approved application and budget, regulations, terms and conditions of the award, applicable federal cost principles, USDA assistance regulations, and NIFA General Awards Administration Provisions at 7 CFR part 3430, subparts A through E.

B. Award Notice

The award document will provide pertinent instructions and information including, at a minimum, the information described in [2 CFR 200.210](#).

See <http://www.nifa.usda.gov/business/awards/awardterms.html> to view current NIFA award terms and conditions.

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 may include, but are not limited to, the ones listed on the NIFA web page – <http://nifa.usda.gov/federal-regulations>.

NIFA Federal Assistance Policy Guide—a compendium of basic NIFA policies and procedures that apply to all NIFA awards, unless there are statutory, regulatory, or award-specific requirements to the contrary—is available at <http://nifa.usda.gov/policy-guide>.

Responsible and Ethical Conduct of Research

Refer to Part II, D for more information.

D. Expected Program Outputs and Reporting Requirements

The output and reporting requirements are included in the award terms and conditions (see <http://www.nifa.usda.gov/business/awards/awardterms.html> for information about NIFA award terms). If there are any program or award-specific award terms, those, if any, will be identified in the award.

It is expected that the program outputs will conform to the purpose of the Potato Breeding Research Program.

The principal outputs will consist of new, superior performing potato varieties developed using classical, molecular, and biotechnology methods that are brought to the market place as fast as possible.

Information documenting the optimal use and benefits to utilizing these materials by production and supply chain users, and consumers.

Ancillary or supplemental outputs may include, but are not limited to improved classical, molecular, or biotechnology methods for increasing the efficiency of variety development; or, other improvements in bringing new superior performing varieties to growers and the market place.

PART VII—AGENCY CONTACT

Applicants and other interested parties are encouraged to contact:

Programmatic Contact –

Jeffrey Steiner
Title: National Program Leader
Unit: Institute of Food Production and Sustainability
Location: 3131 Waterfront Centre
[Full Address and Directions](#)
Phone: (202) 734-1067
Fax: (202) 401-6156
Email: jeffrey.steiner@nifa.usda.gov

Alternate Programmatic Contact –

Megan O'Reilly
Title: Program Specialist
Unit: Institute of Food Production and Sustainability
Location: 3414 Waterfront Centre
[Full Address and Directions](#)
Phone: (202) 445-5410- 5611
Fax: (202) 401-1782
Email: moreilly@nifa.usda.gov

Administrative/Business Contact –

Sondra Watkins
Title: Team Leader
Unit: Office of Grants and Financial Management
Location: 2170 Waterfront Centre
[Full Address and Directions](#)
Phone: (202) 401- 4249
Fax: (202)-401-6271
Email: swatkins@nifa.usda.gov

Rochelle McCrea
Title: Team Leader
Unit: Office of Grants and Financial Management
Location: 2160 Waterfront Centre
[Full Address and Directions](#)
Phone: (202) 401-2880
Fax: (202) 401- 6271
Email: rmccrea@nifa.usda.gov

PART VIII—OTHER INFORMATION

A. Use of Funds; Changes

1. Delegation of Fiscal Responsibility

Unless the terms and conditions of the award state otherwise, awardees 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 Budget or Project Plans

In accordance with [2 CFR 200.308](#), awardees must request prior approval from NIFA for the following program or budget-related reasons:

- (i) Change in the scope or the objective of the project or program (even if there is no associated budget revision requiring prior written approval).
- (ii) Change in a key person specified in the application or the federal award.
- (iii) The disengagement from the project for more than three months, or a 25 percent reduction in time devoted to the project, by the approved project director or principal investigator.
- (iv) The inclusion, unless waived by the federal awarding agency, of costs that require prior approval in accordance with 2 CFR 200 Subpart E—Cost Principles of this part or 45 CFR Part 75 Appendix IX, “Principles for Determining Costs Applicable to Research and Development under Awards and Contracts with Hospitals,” or 48 CFR Part 31, “Contract Cost Principles and Procedures,” as applicable.
- (v) The transfer of funds budgeted for participant support costs as defined in §200.75 Participant support costs to other categories of expense.
- (vi) Unless described in the application and funded in the approved federal awards, the subawarding, transferring or contracting out of any work under a federal award, including fixed amount subawards as described in §200.332 Fixed amount subawards. This provision does not apply to the acquisition of supplies, material, equipment, or general support services.
- (vii) Changes in the approved cost-sharing or matching provided by the non-federal entity.
- (viii) The need arises for additional federal funds to complete the project.

The awardee will be subject to the terms and conditions identified in the award. See <http://www.nifa.usda.gov/business/awards/awardterms.html> for information about NIFA award terms.

B. Confidential Aspects of Applications and Awards

When an application results in an award, it becomes a part of the record of NIFA transactions, available to the public upon specific request. Information that the Secretary of Agriculture 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. We will retain for three years a copy of an application that does not result in an award. 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.

C. Regulatory Information

For the reasons set forth in the final Rule related Notice to 2 CFR Part 415, Subpart C, 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.

D. Definitions

Please refer to [7 CFR 3430, Competitive and Noncompetitive Non-formula Financial Assistance Programs--General Award Administrative Provisions](#), for applicable definitions for this NIFA grant program.