



REQUEST FOR APPLICATIONS **Special Research Grants Program Potato Research**

MODIFICATIONS: 04/11/2023 – This RFA has been modified from the original announcement. Edits are indicated using track changes and red font so the public/potential applicants can identify the changes within the solicitation.

Edits appear on pages: 1 and 7

FUNDING YEAR: Fiscal Year (FY) 2023

LETTER OF INTENT DEADLINE: Not Required

APPLICATION DEADLINE: May 18, 2023

ANTICIPATED PROGRAM FUNDING: \$3,699,443

\$900,000 - \$950,000 \$500,000 - \$1,500,000 AVERAGE INDIVIDUAL AWARD

> RANGE: per year (continuation)

FUNDING OPPORTUNITY NUMBER: USDA-NIFA-SRGP-009702

ASSISTANCE LISTING NUMBER: 10.200

INITIAL ANNOUNCEMENT

National Institute of Food and Agriculture United States Department of Agriculture

Assistance Listing Number (ALN): The Special Research Grants Program--Potato Research/AN is listed in the Assistance Listings under number 10.200.

Table 1: Key Dates and Deadlines

Task Description	Deadline
Application:	5:00 P.M. Eastern, May 18, 2023
	[Ref to Part I, C of this RFA]
Letter of Intent:	Not Required
Applicants Comments:	
	(NIFA may not consider comments received after the sixth
	month)

Advancing Diversity, Equity, Inclusion, and Accessibility (DEIA). The National Institute of Food and Agriculture (NIFA) recognizes research, education, and extension efforts will have the greatest impacts when programs are grounded in DEIA. NIFA is committed to enhancing diversity, equity, inclusion, and accessibility of programs and encourages individuals, institutions, and organizations from underserved communities to apply to funding opportunities as lead, co-lead, or subaward recipient(s), and to engage as leaders in the peer panel review process to support the development of strong networks and collaborations. NIFA encourages applications that engage diverse communities and have broad impacts through research, education, extension, and integrated activities to address current and future challenges.

Stakeholder Input. NIFA seeks comments on all request for applications (RFAs) so it can deliver programs efficiently, effectively, with integrity, and with a focus on customer service. NIFA considers comments to the extent possible when developing RFAs, and uses comments to help 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)). Applicants may submit written comments to Policy@usda.gov (email is for comments only). Please use the following subject line: Response to the Special Research Grants Program--Potato Research RFA.

EXECUTIVE SUMMARY

NIFA requests applications for the Special Research Grants Program--Potato Research (Potato Research) fiscal year (FY) 2023 to support breeding research that leads to the development and commercial use of superior performing potato varieties that address significant challenges to the U.S. potato industry. The anticipated amount available for grants in FY 2023 is approximately \$3,699,443.

This notice identifies the objectives for Potato Research projects, deadlines, funding information, eligibility criteria for projects and applicants, and application forms and associated instructions. This is a region-based, integrated research and extension program that focuses on the development, testing, and release of superior commercial potato varieties.

TABLE OF CONTENTS

EXECUTIVE SUMMARY		3
TA	ABLE OF CONTENTS	4
TA	ABLE OF TABLES	5
PA	ART I. FUNDING OPPORTUNITY DESCRIPTION	6
A.	Legislative Authority	
B.	Purpose and Priorities	
C.	Program Area Description	
PA	ART II. AWARD INFORMATION	9
A.	Available Funding	9
В.	Application Restrictions	
C.	Project and Grant Types	
D.	Scientific Peer Review	
E.	Ethical Conduct of Funded Projects	10
PA	ART III. ELIGIBILITY INFORMATION	
A.	Eligibility Requirements	
В.	Cost Sharing or Matching	11
PA	ART IV. APPLICATION AND SUBMISSION	12
A.	Method of Application	
В.	Content and Form of the Application	
C.	Submission Dates and Times	
D.	Funding Restrictions	17
	ART V. APPLICATION REVIEW REQUIREMENTS	18
A.	NIFA's Evaluation Process	
В.	Evaluation Criteria	
C.	Organizational Management Information	
D.	Application Disposition	20
	ART VI. AWARD ADMINISTRATION	
Α.	General	
В.	Administrative and National Policy Requirements	21
C.	Expected Program Outputs and Reporting Requirements	21
PA	ART VII. OTHER INFORMATION	
A.	Use of Funds and Changes in Budget	
В.	Confidential Aspects of Applications and Awards	
C.		
D.	Limited English Proficiency	23
AP	PPENDIX I: AGENCY CONTACT	24
AP	PPENDIX II: GLOSSARY OF TERMS	25
ΑD	PPENDIX III: DEFINITIONS	26
H	. 1 ENDIA III. DEFINITIONS	<i>2</i> 0

TABLE OF TABLES

Table 1: Key Dates and Deadlines	2
Table 2: Program Key Information	
Table 3: Steps to Obtain Application Materials	
Table 4: Help and Resources	
Table 5: Key Application Instructions	

PART I. FUNDING OPPORTUNITY DESCRIPTION

A. Legislative Authority

The Special Research Grants Program--Potato Research (Potato Research) is authorized under Section 2(c)(1)(B) of the Competitive, Special, and Facilities Research Grant Act as amended [7 U.S.C. 3157(c)(1)(B)].

B. Purpose and Priorities

Per the Statute, the purpose of the special grant program is conducting research, extension, or education activities to facilitate or expand promising breakthroughs in areas of the food and agricultural sciences of importance to the United States. These programs promote excellence in research, extension, or education on a regional and national level; promote the development of regional research centers; promote the research partnership between the Department of Agriculture, colleges and universities, research foundations, and State agricultural experiment stations for regional research efforts; and facilitate coordination and cooperation of research, extension, or education among States through regional grants.

Potato Research, Assistance Listing 10.200, supports regional potato (*Solanum tuberosum L*.) research and extension that focuses on the development, testing, and release of superior commercial potato varieties using classical breeding and advanced molecular and biotechnological approaches. The development and utilization of high-throughput methods is highly encouraged 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 release of superior materials to commercial producers as soon as possible.

Potato Research is aligned with the following USDA Strategic Goals through funding fundamental and applied research to meet:

- 1. Strategic Goal 1: Combat Climate Change to Support America's Working Lands, Natural Resources and Communities.
- 2. Strategic Goal 2: Ensure America's Agricultural System is Equitable, Resilient, and Prosperous.
- 3. Strategic Goal 3: Foster an Equitable and Competitive Marketplace for All Agricultural Producers.
- 4. Strategic Goal 4: Make Safe, Nutritious Food Available to All Americans.

Potato Research also aligns with USDA Plant Breeding Roadmap.

Global Engagement. NIFA supports global engagement that advances U.S. agricultural goals. NIFA recognizes that collaboration with international partners may be necessary to attain the agency's goals for U.S. agriculture, promote global competence of our nation's future agricultural workforce, and promote safe and nutritious food security in a growing world. Therefore, although application to this RFA is limited to eligible U.S. institutions, applicants may collaborate with international partners, to include subcontracts to international partners or other institutions. Applications must clearly demonstrate benefits to the U.S.

For a program informational webinar please visit the <u>NIFA calendar</u> for dates, event registration, and link. If you need a reasonable accommodation to participate in any of the informational webinars listed, please contact the event host listed no later than 10 days prior to the event.

Table 2: Program Key Information

Table 2. I logiam Rey information	
Title	Description
Program Code:	AN
Program Code Name:	Potato Breeding
ALN:	10.200
Project Type:	Integrated Research Extension
Grant Type:	Standard
Application Deadline	May 18, 2023
Grant Duration:	24 Months
Anticipated # of Awards:	4
Maximum Award Amount:	\$950,000 \$1,500,000 per year
	(continuation)

C. Program Area Description

The Potato Research program (program code AN) will fund two-year projects that have great potential for developing and releasing new potato varieties with a high value to the commercial U.S. potato industry. The Potato Research program encourages applicants to establish and work through regional, multi-location, research breeding 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 Research program seeks to enhance the effectiveness of limited state, federal, and industry resources and accelerate the development of superior varieties that produce benefits to the potato industry.

NIFA is soliciting applications for FY 2023 Potato Research program that address one or more of the following research areas that will produce outcomes important to the U.S. potato industry:

- 1. Develop superior performing varieties 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. Identify and incorporate traits into varieties for improved water and nutrient use efficiency that result in decreased demand for irrigation water and fertilizer applications, while maintaining desired yield and end market quality;
- 3. Identify and develop desirable yield, storability, consumer, and other value-added quality traits for use in new potato varieties; or
- 4. Develop high throughput methods for rapidly selecting traits, specifically for new superior-performing varieties targeted for specific markets.

The goals of this program imply that successful proposals will be associated with practicing, variety-releasing breeding programs. Fundamental science discovery projects that are not currently associated with a potato breeding program are not appropriate for this grant program.

Two Year Work Plan: Applicants will submit a two-year work plan with a budget for each of the two years. The two-year work plan and budget will be reviewed, but only the first year of funding for the work plan will be awarded in FY 2023. Second-year funding is contingent upon the following: the timely submission of a continuation request; a progress report that demonstrates successful compliance of the requirements of the program; and sufficient annual appropriations from Congress in FY 2024.

Applicants are encouraged to provide evidence of qualified staff, suitable equipment, and facilities; capacity to lead a multi-institutional, multi-state research and extension 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. Applicants are encouraged to provide specific workplan outcomes with measurable milestones and with activity dependencies clearly explained.

Industry Support Letter: At least one letter of support from industry partners is required. The intent of this letter is to verify industry relevance. This could include farmer organizations or other industry groups that understand the needs of the potato industry such as a state, regional, or national association.

Management Plan: Applications must provide a Data Management Plan (DMP) that describes public access to the research results (see Management Plan Section IV.B 3.c7). Use of automated DMP builders is encouraged, for example, the DMP Tool. Inclusion of governance plans and processes for updating the data management plan to incorporate new knowledge is strongly advised; a DMP that adheres to FAIR data principles (https://www.go-fair-org/fair-principles/) is strongly encouraged.

Examples of previously funded projects by the Potato Research program can be found by searching the <u>NIFA Data Gateway</u>.

PART II. AWARD INFORMATION

A. Available Funding

The amount available for Potato Research grants in FY 2023 is approximately \$3,699,443. Enactment and implementation of appropriations or authorizing legislation may affect the availability 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 <u>Automated Standard Applications for Payment System</u>.

B. Application Restrictions

NIFA will evaluate applications using the criteria described in <u>Part V</u> of this RFA. Application for FY2023 is limited to the following application types:

- 1. *New application*: New applications will be evaluated using the criteria described in <u>Part V</u> of this RFA and are subject to the due dates herein (see <u>Appendix III</u> for definition).
- 2. Resubmitted application: Resubmitted applications must include the respond to the previous review panel summary and are subject to the same criteria and due dates herein. Resubmitted applicants must enter the NIFA-assigned proposal number of the previously submitted application in the Federal Field (Field 4) on the application form (see Appendix III for definition).
- 3. Renewal application. Renewal applications must contain the same information as required for new applications and must contain a progress report. The progress report must include the implementation of the data management plan (DMP) of the previously funded project. Renewal applications are subject to the same criteria and due dates herein. Applicants submitting a renewal application must enter the NIFA-assigned proposal number of the previously approved application in the Federal Field (Field 4) on the application form (see Appendix III for definition).
- 4. *Resubmitted renewal application*. Resubmitted renewal applicants must provide a progress report, respond to the previous review's panel summary, and are subject to the same criteria and due dates herein. The progress report must include the implementation of the data management plan (DMP) of the previously funded project. Applicants submitting a renewal application must enter the NIFA-assigned proposal number of the previously approved application in the *Federal Field (Field 4)* on the application form (see Appendix III for definition).

C. Project and Grant Types

Only region-based, multi-state projects which integrate research and extension objectives that address potato breeding to improve potato varieties, their adoption, and use for commercial production will be considered.

D. Scientific Peer Review

7 U.S.C. 3157 (c)(5) (also cited as the Competitive, Special, and Facilities Research Grant Act) 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 <u>7 CFR</u> Part 3400.20. The regulations impose the following requirements:

1. Scientific peer review: Prior to the award of a standard 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 applicant organization. Often this review is conducted by faculty peers and include industry assessment for relevance to finding solutions to regional or national challenges. 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.

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 <u>7 CFR</u> 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. Ethical Conduct of Funded Projects

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 must, upon request, make available to NIFA the policies, procedures, and documentation to support the conduct of the training. See Responsible and Ethical Conduct of Research for further information.

PART III. ELIGIBILITY INFORMATION

A. Eligibility Requirements

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 1962 McIntire-Stennis Cooperative Forestry Research Act, Pub. L. 87-778, as amended (16 U.S.C. 582a et seq.), and accredited schools or colleges of veterinary medicine for the purpose of facilitating or expanding ongoing State-Federal food and agricultural research, extension, or education programs. 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.

Duplicate or Multiple Submissions – submission of duplicate or predominantly overlapping applications is not allowed. NIFA will disqualify both applications if an applicant submits multiple applications that are duplicative or substantially overlapping to NIFA programs within the same fiscal year. For those new to Federal financial assistance, NIFA's <u>Grants Overview</u> provides highly recommended information about grants and other resources to help understand the Federal awards process.

B. Cost Sharing or Matching

No Match Required - The Potato Research Program has **NO** matching requirement. NIFA will not factor matching resources into the review process as an evaluation criterion.

PART IV. APPLICATION AND SUBMISSION

A. Method of Application

Applicants must apply to this RFA electronically; no other method or response is accepted. The electronic application for this RFA and additional resources are available on <u>Grants.gov</u> and <u>Grants 101</u>. **Table 3** provides instructions on how to obtain an electronic application. **Part III** of the <u>NIFA Grants Application Guide</u> contains detailed information regarding the <u>Grants.gov</u> registration process. <u>The NIFA Grants Application Guide</u> is contained in the specific funding opportunity package or a sample of the guide can be found <u>here</u>. When applying for a NIFA award, it is important to reference the version of the guide that is included in the specific funding opportunity application package.

Table 3. Steps to Obtain Application Materials

Steps	Action
Step One: Register New Users to Grants.gov must register early with Grants.gov submitting an application (Register Here).	
Step Two: Download Adobe	Download and Install <u>Adobe Reader</u> (see <u>Adobe Software Compatibility</u> for basic system requirements).
Step Three: Find Application Using this funding opportunity number USDA-NIFA-SRGP-0 search for application here: Opportunity Package.	
Step Four: Assess Readiness	Contact an AR prior to starting an application to assess the organization's readiness to submit an electronic application.

Table 4: Help and Resources

Grants.gov Support	NIFA Support
Grants.gov Online Support	Email: grantapplicationquestions@usda.gov
Telephone support: 800-518-4726 Toll-	
Free or 606-545-5035	Key Information: Business hours: Monday thru
Email support: support@grants.gov	Friday, 7a.m. – 5p.m. ET, except <u>federal holidays</u>
Self-service customer-based support:	
Grants.gov iPortal	
Key Information: Customer service	
business Hours 24/7, except federal	
<u>holidays</u> .	

B. Content and Form of the Application

The NIFA Grants Application Guide is part of the corresponding application package for this RFA. The RFA overrides the NIFA Grants Application Guide if there is a discrepancy between the two documents. Applicants that do not meet the application requirements, to include partial applications, risk being excluded from NIFA's review. NIFA will assign a proposal number to all

applications that meet the requirements of this RFA. Applicants must refer to the proposal number when corresponding with NIFA. **Table 5** outlines other key instructions for applicants.

Table 5: Key Application Instructions

Table 5. Key Application instructions			
Instruction	References (All references are to the <u>NIFA Grants</u> <u>Application Guide</u>)		
Attachments must be in a portable document format (PDF) format.	Part IV		
Check the manifest of submitted files to verify attachments are in the correct format.	Part IV		
Conduct an administrative review of the application before submission.	Part IV		
Follow the submission instructions.	Part IV		
Provide an accurate email address, where designated, on the SF-424 R&R.	Part V		
Contact the <u>Grants.gov</u> helpdesk for technical support and keep a record of the correspondence.	N/A		
Contact NIFA if applicant does not receive correspondence from NIFA regarding an application within 30 days of the application deadline.	N/A		

SF 424 R&R Cover Sheet. See Part V of the NIFA Grants Application Guide for the required certifications and assurances.

SF 424 R&R Project/Performance Site Location(s). See Part V of the NIFA Grants Application Guide.

R&R Other Project Information Form. See Part V of the NIFA Grants Application Guide.

- 1. **Field 7**. Project Summary (PS)/Abstract. The PS must show how the project goals align with the program goals of the Potato Research Program. See **Part V** of the <u>NIFA Grants Application Guide</u> for instructions and suggested templates.
- 2. **Field 8**. Project Narrative (PN). The PN must not exceed 18 *1.5 spaced* pages of written text and up to 3 *1.5 spaced* additional pages for figures and tables (the font size for tables should be no smaller than 11 points, Times New Roman). The page limits outlined here ensure fair and equitable competition. Appendices to the PN are allowed if they are directly germane to the proposed project. Do not add appendices to circumvent the page limit.

The PN must include all the following:

- a. Introduction. Identify which of the four research areas you are applying for and the percentage of the project in each area if multiple areas are addressed. Clearly state the high priority need of the potato industry, who will benefit and how they will benefit and the research and the specific goals of the proposed research. Summarize the body of knowledge or other past activities related to your proposed research citing the work of key project personnel or others that are relevant to the project. Preliminary data or information pertinent to the proposed research should be included in this section. If you have received previous funding from this program, be sure to outline that work and describe any relationship to this new work, especially if this new proposal builds off of early work. Describe the qualifications of key personnel, adequacy of facilities, and the plant breeding and project management capability of the applicant institution.
- b. <u>Rational and Significance</u>. Concisely present the rationale behind the proposed research as it relates to the goals of this RFA as well as the specific research area (section I.C.) you will be addressing. This section should address:
 - i. The priority-setting process and method of engaging stakeholder involvement and enlisting their support in problem identification, planning, implementation of the research, evaluation, and utilization of results.
 - ii. The application of your research to the long-range enhancement of the potato industry and U.S. agriculture.
 - iii. Describe any coordination of your research in national or regional efforts, and how this research complements other work conducted by land-grant and other universities, Federal agencies, and industry. This may include utilization of Hatch and Hatch Multistate support, and industry funding and other resources contributing to the project.
 - iv. Discuss the contributions and novel ideas that the proposed project offers.
- c. <u>Objectives</u>. All applications must include a statement(s) of specific objectives of the proposed effort in clear, concise, complete, and logically arranged terms.
- d. <u>Approach</u>. Describe how you will address each stated objective. Include in your approach:
 - i. Methods to be used in carrying out the research and extension components.
 - ii. Means by which results will be analyzed, assessed, and interpreted.
 - iii. A detailed description of how you will communicate your findings and transfer your genetic materials, relevant information, and other technologies to specific, intended commercial users (Information Dissemination Plan).
 - iv. A brief description of the overall potato breeding program and its capabilities, including a clear description of each team members' role and responsibility to this project.
 - v. 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.
- e. <u>Expected outcomes and benefit.</u> 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:
 - i. Anticipated specific uses and users of new genetic materials or other products.

- ii. Specific changes in knowledge about potato and its performance that will directly result from your research.
- iii. Also, present the status and expected advancement to the marketplace of new plant materials, information, or other technology components measured as technology readiness level (TRL).
- iv. Performance measures that can be reported 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.
- v. Estimated increases in profit or risk reductions when growing potato, or other quantitative measures impact.
- vi. Describe the potential long-term benefits of utilizing the new technology based on current knowledge and practice, and the estimated impact on the potato industry and American agriculture.

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.

- 3. Field 12, Add Other Attachments. See Part V of the NIFA Grants Application Guide.
 - i) 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.
 - ii) 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.).
 - iii) Industry Support Letter (see Part I, C).
 - iv) **Data Management Plan.** A Data Management Plan (DMP) is required and is to clearly articulate how the project director (PD) and co-PDs plan to manage and disseminate the data generated by the project. The DMP will be considered during the merit review process (see Part V, B.). **See Part III Section 3.1 of the NIFA Grants Application Guide for NIFA attachment specifications**.

The requirements for preparation and inclusion of a DMP in your application are included on the following web page, https://nifa.usda.gov/resource/data-management-plan-nifa-funded-research-projects. Also included on the web page are FAQs and information about accessing examples of DMPs. DMP components a. through e., below, are examples of information accessible through that web page:

- a. Expected Data Type: Describe the type of data (e.g., digital, non-digital) and how they will be generated (lab work, field work, surveys, etc.). Are these primary or metadata?
- b. Data Format: For scientific data to be readily accessible and usable it is critical to use an appropriate community-recognized standard and machine-readable formats when they exist. The data should preferentially be stored in recognized public databases appropriate for the type of research conducted. Regardless of the format used (notebook, samples, images, spreadsheet, etc.), that data set should contain enough information to allow independent investigators to understand, validate, and use the data.
- c. Data Storage and Preservation: Applicants should outline strategies, tools, and contingency plans that will be used to avoid data loss, degradation, or damage during the project and long term.
- d. Data Sharing and Public Access: Describe your data access and sharing procedures during and after the grant. Provide any restrictions such as copyright, confidentiality, patent, appropriate credit, disclaimers, or conditions for use of the data by other parties.
- e. Roles and Responsibilities: Who will ensure implementation? This is particularly important for multi- investigator and multi-institutional projects. Provide a contingency plan in case key personnel leave the project. Also, what resources will be needed for the DMP? If funds are needed, have they been added to the budget request and budget narrative? Projects must budget sufficient resources to develop and implement the proposed DMP.

R&R Senior/Key Person Profile (Expanded). See Part V of the NIFA Grants Application Guide for profile requirements, details about the biographical sketch, and suggested support templates.

R&R Personal Data. This information is voluntary and is not a precondition of award (see **Part** V of the NIFA Grants Application Guide).

R&R Budget. See Part V of the NIFA Grants Application Guide.

- 1. Match Not required.
- 2. Indirect costs (IDC) See <u>Part IV, D</u> of this RFA for funding restrictions regarding indirect cost, and **Part V** of the <u>NIFA Grants Application Guide</u> for additional information.

Supplemental Information Form. See Part V of the NIFA Grants Application Guide.

- 1. Field 2. Program to which the applicant is applying. Enter the program name (Potato Breeding Research/PBR) the program code ("AN"). Accurate entry is critical.
- 2. Field 8. Conflict of Interest List. See Part V of the NIFA Grants Application Guide.

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.

Instructions for submitting an application are included in Part IV, Section 1.5 of the NIFA Grants.gov Application Guide.

Applications must be received by Grants.gov by **5 p.m. Eastern Time on May 18, 2023**. 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.

D. Funding Restrictions

No Indirect Cost (IDC). IDC is not authorized for this RFA.

Per Section 1473 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) Indirect Costs is not allowed for the Special Research Grants Program-Potato Research. 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.

All 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.

PART V. APPLICATION REVIEW REQUIREMENTS

A. NIFA's Evaluation Process

NIFA evaluates 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 scientific peer- review process will be used to technically evaluate applications that meet the administrative requirements using a review panel (see NIFA Peer Review Process).

Scientific Peer Review Process:

NIFA selects reviewers for the review panel based upon their training and experience in relevant scientific, extension, or education fields, taking into account the following factors:

- 1. 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.
- 2. The need to include experts from various areas of specialization within relevant scientific, education, or extension fields.
- 3. The need to include 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.
- 4. The 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.
- 5. The need to maintain a balanced composition with regard to race, ethnicity, gender representation, and an equitable age distribution.
- 6. The need to include reviewers who can judge the effective usefulness of each application to producers and the general public.

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

NIFA reserves the right to negotiate with the PD/PI and/or 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 grant for funding.

After the review process has been completed, NIFA sends copies of reviews, <u>not</u> including the identity of reviewers, and a summary (if applicable) of the review panel comments to the PD.

Conflicts of interest. NIFA takes extreme care to prevent any actual or perceived conflicts of interest that may influence the review or evaluation (see NIFA Peer Review Process for Competitive Grant Applications).

B. Evaluation Criteria

A reviewer's written evaluation entails two levels of assessment. First, the reviewer summarizes how well the application addressed each evaluation criterion. After the application has been assessed for strengths and weaknesses of each criterion, the reviewer then evaluates the overall likelihood that the project will have significant outcome and impact. These written reviews are

used to begin panel discussions with other reviewers serving on the scientific merit review panel. Through these discussions, panelists come to consensus on the final rating and ranking of proposals. A complete description of NIFA's peer review process can be found at the NIFA website: NIFA Peer Review Process for Competitive Grant Applications

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

- 1. **RFA alignment** (5 points). Application clearly states which RFA research area(s) will be addressed, and the specified objectives are relevant to RFA purpose and priorities.
- 2. **Design** (60 points). Each of the following components will be considered:
 - The application's methodologies and analytical approaches are appropriate to project objectives, have high scientific merit and effectively integrate the research and extension activities. (25 pts)
 - The application demonstrates a "whole systems approach"; that is a compelling understanding of the problem(s) it will address, the regional production system as a whole, and how the proposed solution(s) will contribute to both. (5 pts)
 - Data Management Plan (DMP) is appropriate, clearly described, and feasible (5 pts).
 - Project is well planned and potentially attainable within project time, scope, and budget. A clear distinction between past work and future work should be described. (The Crop Research TRL (see I.C.) can be used to explain the differences in past and proposed future research.) (10 pts)
 - Awareness of previous or alternative approaches are identified and explained when necessary. Even if a single component is the focus of the project, the proposal must provide a thorough analysis of the broader systems context for why that component is critical. (5 pts)
 - Project feasibility, or likelihood it will help maintain potato as a crop grown in the U.S. and advance the science. (10 pts)
- 3. **Appropriateness of budget** (5 points). Budget allocations reflect the personnel and tasks associated with the activities needed to accomplish the objectives. The budget plan describes how this program's funding complements other funding sources including Federal capacity and competitive funds, and state, industry, and other kinds of support.
- 4. A region-based, multi-state, and industry-engaged approach (10 points). The application documents the necessary collective expertise in biological sciences, physical sciences, engineering, socio-economic sciences, extension, and program evaluation, as well as participation from principal stakeholders and partners. Qualifications of project personnel and engagement with industry are clearly demonstrated. How these experts collaborate to reach project goals, increasing the sustainability, productivity, and profitability of the potato industry, should be well described.
- 5. **Outreach plan** (20 points). Application includes a detailed extension engagement and outreach plan and schedule for how 1) team interacts with interested communities (e.g., farmers) to understand need and 2) new genetic materials, information, knowledge, and

technology will be delivered to those served by the project. A description of how extension outreach impacts will be measured and reported is also included.

C. Organizational Management Information

Applicants must submit specific management information prior to an award and update the information as needed. Applicants may only need to provide an update if there was a change in previously provided information under this or another NIFA program. NIFA provides the requisite forms during the pre-award process. Although an applicant may be eligible for award under this program, 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, or a determination that an applicant is not responsible).

D. Application Disposition

Applicants may withdraw at any time before NIFA makes a final funding decision. NIFA will retain all applications, including withdrawn applications and unfunded applications.

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.

Award Notice. The award document will provide pertinent instructions and information as described in 2 CFR 200.211 (see NIFA's Terms and Conditions).

B. Administrative and National Policy Requirements

Several federal statutes and regulations apply to grant applications and the projects outlined in this RFA (some are listed here: <u>Federal Regulations</u>). Unless specifically noted by statue or award-specific requirements, <u>NIFA Federal Assistance Policy Guide</u> applies to all NIFA awards.

C. Expected Program Outputs and Reporting Requirements

The output and reporting requirements are included in the award terms and conditions (see <u>NIFA Terms and Conditions</u> 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 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 marketplace 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 marketplace.

PART VII. OTHER INFORMATION

A. Use of Funds and Changes in Budget

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.

Changes in Budget or Project Plans. In accordance with <u>2 CFR 200.308</u>, awardees must request prior approval from NIFA for the following program or budget-related reasons (the awardee is subject to the terms and conditions identified in the award):

- 1. Change in the scope or the objective of the project or program without prior written approval (even if there is no associated budget revision requiring).
- 2. Change in a key person specified in the application or the federal award.
- 3. Disengagement from the project for more than three months, or a 25 percent reduction in time devoted to the project.
- 4. Inclusion of costs that require prior approval in accordance with <u>2 CFR 200 Subpart E</u> (Cost Principles), or <u>45 CFR Part 75 Appendix IX</u>, (Principles for Determining Costs Applicable to Research and Development under Awards and Contracts with Hospitals), or <u>48 CFR</u>, unless waived by the federal awarding agency, <u>48 CFR Part 31</u>, Contract Cost Principles and Procedures;
- 5. Transfer of funds budgeted for participant support costs to other categories of expense (2 CFR 200.456 Participant support costs);
- 6. Sub-awarding, transferring or contracting out of any work under a federal award, including fixed amount sub-awards (see <u>2 CFR 200.333, Fixed Amount Sub-awards</u>), unless described in the application and funded in the approved federal awards. This provision does not apply to the acquisition of supplies, material, equipment, or general support services.
- 7. Changes in the approved cost-sharing or matching provided by the non-federal entity; and
- 8. The need for additional federal funds to complete the project.

The awardee will be subject to the terms and conditions identified in the award. (See <u>NIFA</u> <u>Terms and Conditions</u> 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

This program is not subject to the provisions of 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. Limited English Proficiency

NIFA offers language access services, such as interpretation and translation of vital information, free of charge. If you need interpretation or translation services, please visit NIFA Language Access Services or contact Lois Tuttle, Equal Opportunity Specialist, at Lois.Tuttle@usda.gov or (443) 386-9488.

APPENDIX I: AGENCY CONTACT

Program Contacts

Christian Tobias National Program Leader <u>christian.tobias@usda.gov</u> 610-312-7619

Tom Bewick National Program Leader tbewick@usda.gov 202-913-3052

Alternative Program Contact: Zach Barrington Program Specialist Zack Barrington@usda.gov (913) 787-0697

For administrative questions related to;

- 1. Grants.gov, see Part IV of this RFA
- 2. Other RFA or application questions, please email grantapplication questions@usda.gov
- 3. Awards under this RFA, please email awards@usda.gov

U.S. Postal Mailing Address:

National Institute of Food and Agriculture U.S. Department of Agriculture P.O. Box 419205, MS 10000 Kansas City, MO 64141-6205

Courier/Package Delivery Address:

National Institute of Food and Agriculture U.S. Department of Agriculture 2312 East Bannister Road, MS 10000 Kansas City, MO 64141-3061

APPENDIX II: GLOSSARY OF TERMS

Glossary of Terms

Assistance Listing Number – ALN

Authorized Representative – AR

Agricultural Research, Extension, and Education Reform Act of 1998 – AREERA

Data Management Plan – DMP

National Institute of Food and Agriculture – NIFA

Request for Application – RFA

Research, Education, and Economics – REE

United States Department of Agriculture – USDA

APPENDIX III: DEFINITIONS

Refer to <u>7 CFR 343Competitive and Noncompetitive Non-formula Federal Assistance Programs</u> – General Award Administrative Provisions for additional definitions.

Definitions

Continuation Award:

An award instrument by which NIFA agrees to support a specified level of effort for a predetermined period of time with a statement of intention to provide additional support at a future date, provided that performance has been satisfactory, appropriations are available for this purpose, and continued support would be in the best interest of the federal government and the public.

Matching:

The process through which a grant recipient match awarded USDA funds with cash and in-kind contributions on a dollar-for-dollar basis. The matching funds must derive from non-Federal sources.

New Application:

An application not previously submitted to a program.

Renewal Application:

A project application that seeks additional funding for a project beyond the period that was approved in an original or amended award.

Resubmitted Application:

A project application that was previously submitted to a program, but the application was not funded.

Resubmitted Renewal Application:

A project application that requests additional funding for a project beyond the period that was approved in the original award. This is an application that had previously been submitted for renewal to but not funded