

Special Research Grants Program Aquaculture Research

FY 2018 Request for Applications (RFA)

APPLICATION DEADLINE: May 17, 2018

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

SPECIAL RESEARCH GRANTS PROGRAM: AQUACULTURE RESEARCH (AQUA)

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 May 17, 2018.**

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 Aquaculture Research RFA.

Visit the [NIFA website](#) to access a factsheet on the Center of Excellence (COE) designation process, including COE criteria, and a list of programs that offered COE opportunities in FY 2018. You may also review a recording of COE outreach webinars held in February and March of 2015 and COE implementation webinars held in August and September of 2015 from the site. We will update COE webpages as appropriate.

EXECUTIVE SUMMARY: NIFA requests applications for the Aquaculture Research Competitive Grants Program (henceforth, Aquaculture Research program) for Fiscal Year (FY) 2018 to fund applied aquaculture research projects in the areas of: 1) genetics; 2) disease; 3) production systems; and 4) economics. The amount available for support of this program in FY 2018 is approximately \$1.2 million.

This notice identifies the objectives for Aquaculture Research program projects, deadline dates, funding information, eligibility criteria for projects and applicants, and application forms and associated instructions needed to apply for an Aquaculture Research program grant.

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PART I—FUNDING OPPORTUNITY DESCRIPTION

A. Legislative Authority

The authority for the Aquaculture Research program is contained in the Competitive, Special, and Facilities Research Grant Act, Pub. L. No. 89-106, as amended (7 USC 3157 (C)(1)(A)).

B. Purpose and Priorities

The purpose of the Aquaculture Research program is to support the development of an environmentally and economically sustainable aquaculture industry in the U.S. by generating new science-based information and technology to address industry constraints. Results of projects supported by this program are intended to help improve the profitability of the U.S. aquaculture industry, reduce the U.S. trade deficit, increase domestic food security, expand markets for U.S.-produced products, and provide more jobs for rural and coastal America.

Aquaculture produces more than half of the seafood consumed globally, and this contribution is expected to grow. Although U.S. aquaculture production has shown growth, the U.S. has a \$13 billion seafood trade deficit and imports more than 90% (by value) of seafood consumed. The factors that limit aquaculture in the U.S. are complex and multifaceted. Applied research in genetics, disease, production systems, and economics is needed to develop practical solutions that will facilitate growth of the U.S. aquaculture industry. This research will help reduce the U.S. trade deficit in seafood products and enhance the capacity of the U.S. aquaculture industry to contribute to domestic and global food security and economic growth.

For this FY 2018 Aquaculture Research program, NIFA is soliciting applied aquaculture research applications. Applications must:

- 1) directly address major constraints to the U.S. aquaculture industry; and
- 2) focus on one or more of the following Program Area Priorities:
 - Genetics of commercial aquaculture species;
 - Critical disease issues impacting commercial aquaculture species;
 - Design of environmentally and economically sustainable aquaculture production systems; or
 - Economic research for increasing aquaculture profitability.

Priorities defined in this Aquaculture Research Program RFA are aligned with:

- The 2018-2022 USDA Strategic Goals (<https://www.usda.gov/our-agency/about-usda/strategic-goals>) - Strategic Goal #2, Objective 2;
- The USDA Research, Education, and Extension Action Plan (<http://nifa.usda.gov/resource/ree-action-plan>) - Goal 1, Subgoals 1A, 1B, 1Cn and 1D; The NIFA Strategic Plan - FY 2014-2018 (<http://nifa.usda.gov/resource/nifa-strategic-plan-fy2014-fy2018>) - Goal 1, Sub-Goal 1.1.

Other key information:

- This program is limited to applied research.

- For the critical disease Program Area Priority, proposals that focus on pathogens that pose a risk to human food safety (vs. those that affect the health of aquaculture species) are outside the scope of this program and will not be accepted for review.
- Applications must clearly state how the research results or technology will be transferred to end-users outside of direct scientific peers. Applications that involve industry participation are encouraged.
- Applicants must clearly describe how their specific research project will increase U.S. aquaculture production or profitability in the short or medium-term (1-5 years after the grant ends).
- Applicants must provide a plan to release research results to the public in a timely manner and provide a description and budgeted plan for the release of research results that is compliant with the terms and conditions that govern USDA NIFA-funded projects in aquaculture. Terms and conditions can be found at: <http://www.nifa.usda.gov/business/awards/awardterms.html>
- Applicants must include power analyses, when appropriate, and describe the experimental design, experimental unit, replication and sample size for each experimental group.
- Applicants are strongly encouraged to review the Use of Fishes in Research Committee document *Guidelines for the Use of Fishes in Research* (2014) which can be found at: <https://fisheries.org/policy-media/science-guidelines/guidelines-for-the-use-of-fishes-in-research/> when developing applications for submission to this RFA.
- The inclusion of students actively engaged in the scholarship of the research projects is strongly encouraged (particularly the inclusion of undergraduate student interns and trainees, graduate students, and post-doctoral research associates) to provide hands-on, experiential learning and training opportunities. Actively engaged students should be encouraged to contribute to presentations, articles, posters, and other expressions of scholarship that reflect their own work on the project.

NIFA encourages (but does not require) projects that develop content suitable for delivery through eXtension (<https://extension.org/>).

NIFA supports global engagement that advances U.S. agricultural goals. To attain the agency's goals for U.S. agriculture, promotion of global competence of our nation's future agricultural workforce, and safe and nutritious food security in a growing world, NIFA recognizes that collaboration with international partners can contribute to advances for U.S. agriculture. Thus, applications in response to this program's RFA may include collaborations with international partners, but may only be submitted by eligible U.S. institutions. Such applications may include subcontracts to international partners or other institutions. Applications must clearly demonstrate benefits to the U.S. Additional guidance on including international activities is provided on the International Partnerships website (<https://nifa.usda.gov/resource/afri-international-partnerships>).

PART II—AWARD INFORMATION

A. Available Funding

The amount available for NIFA support of this Aquaculture Research Program in FY 2018 is approximately \$1.2 million, which is anticipated to fund four awards in FY 2018. There is no commitment by USDA to fund any particular application or to make a specific number of awards.

This program will make research awards up to \$300,000 (total project, not per year). Project periods for this program are limited to a maximum duration of 2 years. The start date of a project must be before October 1, 2018. Recipients may be eligible for a no-cost extension for a third year, but no carryover or extension is permitted for any project beyond 3 years from the start date (any unexpended funds must be returned to the U.S. Treasury).

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 FY 2018, you may only submit an application to the Aquaculture Research program as a **New** or as a **Resubmitted** application.

New application. This is a project application that has not been previously submitted to the NIFA Aquaculture Research program. We will review all new applications competitively using the selection process and evaluation criteria described in Part V—Application Review Requirements.

Resubmitted application. This is an application that had previously been submitted to the NIFA Aquaculture Research program, but not funded. Project Directors (PDs) must respond to the previous review panel summary (see Response to Previous Review, Part IV). We must receive resubmitted applications by the relevant due dates. We will evaluate resubmitted applications in competition with other pending applications in the appropriate area to which they are assigned and review them according to the same evaluation criteria (Part V, B) as new applications. If you are submitting a resubmission application, enter the NIFA-assigned proposal number of the previously-submitted application in the Federal field (Field 4 on the SF 424 form) and choose resubmission as the type of application (Field 8 on the SF 424 form).

C. 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 further information.

PART III—ELIGIBILITY INFORMATION

A. Eligible Applicants

Applications may only be submitted by State agricultural experiment stations, all colleges and universities, other research institutions and organizations, Federal agencies, private organizations or corporations, and individuals for the purpose of 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. Failure to meet an eligibility criterion by the 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.

For those new to Federal financial assistance, a [grants overview page](#) is available on the NIFA website. This page includes information about free Grants 101 Training and other resources that are highly recommended for those seeking an understanding of Federal awards.

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 Aquaculture 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 unless one of the exemptions described herein is applicable. Note that NIFA included information at: http://www.nifa.usda.gov/business/awards/matching_require.html to further assist you in determining if you must meet the new matching requirement.

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. Entities eligible to receive funds under the 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. Entities eligible to receive funds under the 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 certifications at <http://www.nifa.usda.gov/form/form.html>, and for attaching the certification in Part IV, B. of this RFA)
- i. Entities eligible to receive 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 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 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 (NAREEEAB) 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, B. of this RFA.

C. Centers of Excellence

Pursuant to Section 7214 of the Agricultural Act of 2014 (Pub. L. 113-79), beginning in Fiscal Year 2015, for applicable competitive research and extension programs, NIFA will recognize and provide priority in the receipt of funding to applications from “centers of excellence” that carry out research, extension, and education activities that relate to the food and agricultural sciences. NIFA held listening sessions in July 2014 and accepted written comments from stakeholders to inform NIFA’s implementation of the COE provision. Information from the webinars and a summary of the input are available on NIFA’s website at <http://nifa.usda.gov/centers-excellence>.

A COE is composed of one or more of the following entities that provide financial or in-kind support to the COE.

- (A) State agricultural experiment stations;
- (B) Colleges and universities;
- (C) University research foundations;
- (D) Other research institutions and organizations;
- (E) Federal agencies;
- (F) National laboratories;
- (G) Private organizations, foundations, or corporations;
- (H) Individuals; or
- (I) any group consisting of two or more of the entities described in (A) through (H).

COE designation is available only to standard grant applicants. Part IV, B., 3. of this RFA contains additional requirements for COE consideration.

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 where appropriate

Funding Opportunity Number: USDA-NIFA-SRGP-006544

Click “Search.” On the displayed page, click the corresponding link to continue. 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 (<https://www.grants.gov/web/grants/support.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

Electronic applications are to be prepared 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 2.17 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 250-word (or less) summary / abstract should also include the relevance of the project to the goals the Aquaculture Research Program. The summary / abstract may be used for public databases and announcements, therefore, it should be written for a general audience. 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 a total of **15 pages**, including all tables and figures. (12-point font; line spacing not exceeding six lines per vertical inch; and 1-inch margins) regardless of whether it is single- or double-spaced. Please take note, as this differs from other NIFA grant programs. Applicants requesting consideration of center of excellence status must include their justification within the 15-page limit of the project narrative. This maximum (15 pages) is established to ensure fair and equitable competition. Applications exceeding this page limit will be returned without review.

Appendices, such as support letters to the Project Narrative, References cited, may be included in Field 12. Other Attachments (see Part V, 4.12 of the NIFA Grants.gov Application Guide) if they are directly germane to the proposed project and are not included in the 15-page limit.

The Project Narrative attachment must include all of the following:

1) Response to Previous Review (if applicable)

This requirement only applies to Resubmitted Applications or Resubmitted Renewal Applications as described in Part II, B. The Project Narrative attachment is to include two components: 1) a one-page response to the previous review (containing the previous proposal number in the first line) titled “Response to Previous Review” as the first page of the attachment and 2) the 15-page Project Narrative, as required (see Part IV, C. 3. b., above). The one-page “Response to Previous Review” does not count against the 15-page limit of the Project Narrative.

2) Project Narrative

a. Introduction

- i. Include a clear statement of the long-term goal(s) and supporting objectives of the proposed project.
- ii. Summarize the body of knowledge that substantiates the need for the proposed project.
- iii. Include preliminary data/information pertinent to the proposed project. All works cited should be referenced.

b. Rationale and Significance

- i. Present the rationale behind the proposed project and reasons for performing the work at the proposing institution;
- ii. Describe the specific relationship of the proposed project to the Program Area Priorities, and state which of the four Program Area Priorities the proposal is primarily addressing. Applications that do not address at least one Program Area Priority will not be reviewed;
- iii. Clearly document the expected improvement in and sustainability of the U.S. aquaculture industry;
- iv. Estimate the magnitude of the issues and their relevance to stakeholders and to ongoing state-federal food and agricultural research, education, and extension programs; and
- v. Document the role of stakeholders in problem identification, planning, implementation, and evaluation as appropriate. State the degree of industry participation and involvement in the proposed project.

c. Approach

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

- i. A description of the activities proposed and the sequence in which the activities are to be performed;
- ii. Methods to be used in carrying out the proposed project, including the feasibility of the methods and the role and qualification of project partner(s);
- iii. Expected outcomes
- iv. Means by which results will be analyzed, assessed, or interpreted;
- v. How results or products will be used;
- vi. Plans to communicate results to stakeholders and the public (e.g., extension, technology transfer, education activities, workshops) that articulate how the research results or technology will be transferred to end-users outside of direct scientific peers;
- vii. How this specific research project will advance aquaculture production in the U.S. in the short or medium term (1-5 years after the grant ends). How the impacts will be evaluated and reported (a logic model is one suggestion to do this);
- viii. If undergraduate and graduate students, and post-doctoral research fellows are included, how they will be actively engaged in the research;
- ix. Pitfalls that may be encountered;
- x. Limitations to proposed procedures;
- xi. A full explanation of any materials, procedures, situations, or activities related to the project that may be hazardous to personnel, along with an outline or precautions to be exercised to avoid or mitigate the effects of such hazards; and

xii. A timeline for attainment of objectives and for production of deliverables that includes annual milestones with specific, measurable outcomes.

d. Center of Excellence Justification:

For consideration as a COE, you must provide a brief justification statement, as part of your Project Narrative and within the page limits provided, which describes how you meet the standards of a COE, based on the following criteria:

(A) The ability of the COE to ensure coordination and cost effectiveness by reducing unnecessarily duplicative efforts in the research, teaching, and extension activities outlined in this application;

(B) In addition to any applicable matching requirements, the ability of the COE to leverage available resources by using public-private partnerships among agricultural industry groups, institutions of higher education, and the federal government in the proposed research and/or extension activities outlined in this application. Resources leveraged be commensurate with the size of the award;

(C) The planned scope and capability of the COE to implement teaching initiatives that increase awareness and effectively disseminate solutions to target audiences through extension activities of the proposed research and/or extension activity outlined in this application; and

(D) The ability or capacity of the COE to increase the economic returns to rural communities by identifying, attracting, and directing funds to high-priority agricultural issues in support of and as a result of the implementation of the proposed research and/or extension activity outlined in this application.

Additionally, where practicable (not required), COE applicants should describe proposed efforts to improve teaching capacity and infrastructure at colleges and universities (including land-grant colleges and universities, cooperating forestry schools, certified Non-Land Grant Colleges of Agriculture (NLGCA) (list of certified NLGCA is available at http://www.nifa.usda.gov/funding/pdfs/nlgca_colleges.pdf), and schools of veterinary medicine).

c. Field 12. Add Other Attachments - PDF Attachment.

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.

Non-Land Grant College of Agriculture (NLGCA) Certification. If you claim exemption from the new matching requirements as a NLGCA, then you must attach the NLGCA certification letter you requested and received from NIFA. Title the attachment ‘NLGCA Certification’ and save the file as ‘NLGCACertification.’ To request certification as an NLGCA, complete the form at <http://www.nifa.usda.gov/form/form.html>. Note that certification can take 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.

Biographical Sketch - The following are additional instructions of information to include:

- 1) Author identifier (ORCID, <https://orcid.org>) of the researcher if available.
- 2) Digital Object Identifier (DOI) of all publications where possible.

You may also include a list of data publications or published data products relevant to the proposed project, following recommended data citation format.

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.

a. Matching Funds

If you conclude that matching funds are not required as specified under Part III, B Cost-Sharing or Matching, you must include an explanation for your conclusion in the Budget Justification. We will consider this justification when determining final matching requirements or if required matching can be waived. NIFA retains the right to make final determinations regarding matching requirements.

For grants that require matching funds as specified under Part III, B, the Budget Justification must list matching sources along with the identification of the entity(ies) providing the match as well as the total dollar amount being pledged. NIFA is no longer requiring written verification of commitments of matching support (a pledge agreement). However, you are still subject to documentation, valuing and reporting requirements, etc. as specified in 2 CFR Part 200, “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (the Uniform Guidance),” 7 CFR 3430, “Competitive and Noncompetitive Non-Formula Federal Assistance Programs – General Award Administrative Provisions,” and program-specific regulations, as applicable. In instances where match is required, any resulting award will require the signature of an Authorized Representative. Only when NIFA receives the award signed by the AR will award funds be released and available for drawdown.

You must establish the value of applicant contributions in accordance with applicable cost principles. Refer to 2 CFR Part 200, “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (the Uniform Guidance),” for further guidance and other requirements relating to matching and allowable 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 “AQUACULTURE RESEARCH”) and the program code (i.e., enter “AQUA”). 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.

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 17, 2018**. 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

Section 713 of the Consolidated Appropriations Act, 2018 (Pub. L. 115-141) limits indirect costs to 30 percent of the total federal funds provided (or 42.857 percent of total direct costs) under each award. When preparing budgets, you should limit your request for the recovery of indirect costs to the lesser of your institution's official negotiated indirect cost rate or the equivalent of 30 percent of total Federal funds awarded. See Part V section 7.9 of the NIFA Grants.gov Application Guide for further indirect cost information.

You may not use grant funds awarded under this authority to renovate or refurbish research, education, or extension space; purchase or install fixed equipment in such space; or plan, repair, rehabilitate, acquire, or construction of buildings or facilities.

The use of grant funds to plan, acquire, or construct a building or facility is not allowed under this program. With prior approval, and in accordance with the cost principles set forth in 2 CFR part 200, some grant funds may be used for minor alterations, renovations, or repairs deemed necessary to retrofit existing teaching or research spaces in order to carry out a funded project. However, requests to use grant funds for such purposes must demonstrate that the work is essential to achieving the major purpose of the project. Grant funds may not be used for endowment investing

E. Other Submission Requirements

You should follow the submission requirements noted in Part IV, Section 1.5 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:

- 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;
- The need to include experts from various areas of specialization within relevant scientific, education, or extension fields;
- 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;
- 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;
- The need to maintain a balanced composition with regard to minority and female representation and an equitable age distribution; and
- 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 the Aquaculture 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 Aquaculture 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

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 peer review panel. Through

these discussions, peer review 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: https://nifa.usda.gov/sites/default/files/resource/NIFA-Peer-Review-Process-for-Competitive-Grant-Applications_0.pdf.

The three evaluation criteria given below will be weighted equally. For the proposals selected for funding, the budget justification documents are analyzed in detail by the program as well as grants management for appropriateness of the costs proposed.

1. **Proposal Relevance and Effectiveness**— This ascertains if the proposed work: is applied research directed toward one of the four Program Area Priorities identified in this RFA; directly addresses major constraints that currently limit development and progress of domestic aquaculture; clearly states how the research results or technology will be transferred to end-users outside of direct scientific peers; and will accelerate development of the domestic aquaculture industry by increasing production or profitability in the short or medium-term (1-5 years after the grant ends).
2. **Technical/Scientific Merit**— This assesses: whether the approach is technically sound and innovative; whether there are clear project goals and objectives; if the methods are appropriate and the proposal includes all components necessary to achieve goals and objectives; if the proposal includes a concrete, unambiguous, specific desired outcome for domestic aquaculture and has a high probability of achieving that outcome; and if the proposal includes a way to objectively determine its success at achieving its outcomes.
3. **Overall Qualifications of Applicants**— This ascertains whether the applicant and others on the team possess: the necessary education, experience, and training; a demonstrated record of successful technology transfer to end-users outside of direct scientific peers; and the facilities and resources to accomplish the project. This includes applicant’s record of achievement with previous funding, as well as the qualifications of project partners. If the proposal includes the use of outside consultants not yet identified, this criterion includes how clearly the selection factors for the outside consultants are set out, and the expected qualifications of the consultants based on those selection factors.

C. Center of Excellence Status

All eligible applicants will be competitively peer reviewed (as described in Part V, A and B of this RFA), and ranked in accordance with the evaluation criteria. Those that rank highly meritorious and requested to be considered as a COE will be further evaluated by the peer panel to determine whether they have met the standards to be a COE (Part III, C. and Part IV, B). In instances where they are found to be equally meritorious with the application of a non-COE, based on peer review, selection for funding will be weighed in favor of applicants meeting the COE criteria. NIFA will effectively use the COE prioritization as a “tie breaker.” Applicants that rank highly meritorious but who did not request consideration as a COE or who are not deemed to have met the COE standards may still receive funding.

In addition, the applicant’s Notice of Award will reflect that, for the particular grant program, the applicant meets all of the requirements of a COE. Entities recognized as COE will

maintain that distinction for the duration of their period of performance or as identified in the terms and conditions of that award.

D. 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.

E. 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).

F. 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 the Aquaculture 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, they will be identified in the award.

Project Meetings

In addition to reviewing (and monitoring the status of) progress and final technical reports and financial reports, NIFA Program Officers may use regular and periodic conference calls to monitor the awardee's performance as well as PD conferences, workshops, meetings, and symposia to not only monitor the awards, but to facilitate communication and the sharing of project results and impacts. These opportunities also serve to eliminate or minimize NIFA funding of unneeded duplicative project activities. Applicants are required to attend the annual PD meeting and have to budget the costs for attending the PD meeting in their proposal.

PART VII—AGENCY CONTACT

Applicants and other interested parties are encouraged to contact:

Programmatic Contact –

Dr. Gene W. Kim
National Program Leader, Aquaculture
U.S. Department of Agriculture
National Institute of Food and Agriculture
Institute of Food Production and Sustainability
800 9th St., SW; Washington, DC 20024
Telephone: (202) 401-1108
E-mail: Gene.W.Kim@nifa.usda.gov

Administrative/Business Contact –

Garland Robertson
Awards Management Division
National Institute of Food and Agriculture, USDA
800 9th St., SW; Washington, DC 20024
Telephone: 202-401-2160
Email: garland.robertson@nifa.usda.gov

Rochelle McCrea
Awards Management Division
National Institute of Food and Agriculture, USDA
800 9th St., SW; Washington, DC 20024
Telephone: 202-401-2880
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

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. Definitions

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.

E. Materials Available on the Internet

Aquaculture Research Program material may be found at:
www.nifa.usda.gov/funding-opportunity/special-research-grants-program-aquaculture-research