



**2018 Request for Applications
For Funding October 1, 2018 – September 30, 2023**

February 15, 2018

Applications must be submitted and routed for administrative approval in NUgrant by 11:59 PM Central Time on May 7, 2018.

DESCRIPTION and INTENT: The Agricultural Research Division (ARD) / Nebraska Agricultural Experiment Station (NEAES) invites IANR faculty with an ARD appointment (see Eligibility section for details) to participate in McIntire-Stennis Research Projects that benefit Nebraska, its citizens, and the allied forestry industry.

Up to three, new five-year projects (up to \$75,000/year/project for each of five years) in response to this RFA are anticipated*. When the projects are selected for funding, the lead Project Director (PD) / Principal Investigator (PI) will be required to complete project initiation forms in the USDA REEport database. Funding is contingent on approval of the project by the USDA NIFA and will be available on October 1, 2018. The approved project must submit an annual Progress Report by December 31 beginning in 2019 and a final Termination Report by December 31, 2023 via the REEport system.

In 2018, preference will be given to research projects that address: 1) methods to prevent, minimize, or mitigate damage to Nebraska forest ecosystems by fire, insects, diseases, drought, climate variability, or climate change; 2) tree canopy and planting contributions to issues of stormwater runoff (i.e., quantity and quality); OR 3) rural/urban tree canopy cover changes in response to community demographic shifts, particularly in rural communities.

McIntire-Stennis funding is specifically designed to "...assist all states in carrying out a program of state forestry research..." and (to assist in) developing a trained pool of forest scientists capable of conducting needed forestry research, which should include: (1) {forest} ecological restoration; (2) {forest} catastrophe management; (3) valuing and trading {forest} ecological services; (4) energy conservation, biomass energy and bio-based {forest} materials development; (5) forest fragmentation; (6) carbon sequestration and climate change {relative to forests}; and (7) ways of fostering healthy forests and a globally competitive forest resources sector."

McIntire-Stennis projects are five-year plans for which the NEAES provides programmatic support. At the end of each five-year cycle, USDA requires that new project outlines be written. Funding for these IANR projects will be decided through a competitive process; ***previous participation in McIntire-Stennis projects does not guarantee future funding***. This RFA is designed to promote long-term (5-year) programs in forestry research important to Nebraska, while simultaneously enhancing the competitiveness of IANR faculty for extramural funding. Projects that leverage the intellectual and physical resources available throughout UNL are encouraged. Collaborations with state agencies (e.g., the Nebraska Forest Service, Nebraska Game and Parks Commission, Nebraska's Natural Resources

* Forestry Research is defined as: reforestation and management of land for the production of crops of timber and other related products of the forest; management of forest and related watershed land to improve conditions of water flow and to protect resources against floods and erosion; management of forest and related rangeland for production of forage for domestic livestock and game and improvement of food and habitat for wildlife; management of forest lands for outdoor recreation; protection of forest land and resources against fire, insects, disease, or other destructive agents; utilization of wood and other forest products; development of sound policies for the management of forest lands and marketing of forest products; and such other studies as may be necessary to obtain the fullest and most effective use of forest resources." In addition, McIntire-Stennis "...funds should be allocated to the following high priority issues: 1) science of integration (ecosystem or landscape approaches including interdisciplinary multi-state projects); 2) forest ecosystem services; 3) human attitudes and behaviors; 4) conflict, uncertainty, and decision-making; 5) technological advancements (biotechnology, nanotechnology and geospatial technology), productivity, and forest applications; and 6) urban ecosystems" as outlined in the McIntire-Stennis Strategic Plan (<http://www.naufrp.org/pdf/M-S%20Plan.pdf>).

Districts, etc.); federal agencies (US Forest Service, Natural Resources Conservation Service, Environmental Protection Agency, USDA Rural Development, etc.); non-profit organizations (e.g., The Nature Conservancy, Pheasants Forever, National Wild Turkey Federation, etc.); or the private sector are also encouraged. This grant resource is intended to grow and further stimulate active and productive forestry research programs. Successful applications must clearly indicate how the proposed research activity addresses areas of importance to Nebraska's forest and related ecosystems consistent with the intent of the McIntire-Stennis program and its Strategic Plan. In addition, the proposed research, or aspects of it, should clearly be of interest to extramural funding agencies, foundations, or for-profit entities. **Projects most likely to receive funding from this program are likely to be in research areas for which additional investment would enable investigators to leverage these funds to obtain significant extramural funding.**

ELIGIBILITY: The lead PD / lead PI must have a tenure-track appointment with ARD; those with adjunct appointments or those in non-tenure track positions with Research Professor, Professor of Practice, or Extension Educator (assistant, associate or full) titles are also eligible, if they are the lead PD on a current external research grant (with a PCS code of Research in NUgrant and routed via IANR in NUgrant). Co-PDs/Co-PIs and collaborators can be affiliated with any University of Nebraska campus or be employed outside the University of Nebraska system; they need not be in a tenure-track position. Sub-awards outside the UNL system are not allowed; however, collaborators at other institutions may invoice expenses to the project. ARD will not accept invoices from outside the United States.

*At any point in time, an individual may serve as PD on **only one funded project** from the McIntire-Stennis Forestry Research funding opportunity. An individual may serve as a Co-PD, collaborator, or team member on other funded projects from this program.*

SUBMISSION INSTRUCTIONS AND APPLICATION FORMAT: Applications for McIntire-Stennis funding will be accepted ONLY via NUgrant (<http://nugrant.unl.edu>). First-time users of NUgrant should log-in using their my.UNL username and password. To start an application, after login, click "[add new]" next to the "Internal Competitions" link. Select "ARD McIntire-Stennis Research 2018."

Information required as part of the NUgrant application:

1. **Project Director/Principal Investigator and CV/Biosketch** (NUgrant online form): Two-page CV must be in the PDF file format.
2. **Other Investigators** (NUgrant online form): List all other Co-Investigators. Two-page CV must be in the PDF file format.
3. **Key Personnel:** List all other essential project participants.
4. **Project Title, Start/End Dates, Other Support, Internal Funding, Current and Pending Support, Field of Study, and Compliance/Export Control** (NUgrant online forms): Please use a succinct title to describe the overall research project. Project start date must be October 1, 2018 or later with an end date of September 30, 2023. Provide a description of other support for the proposed studies, if any. Other internal funding and current and pending external support are NUgrant online forms and this information is automatically provided for applications that have been routed through NUgrant. Key personnel that are not employed by UNL are not required to provide information for current and pending external support. Select the most appropriate general field of study from the available list in NUgrant. Information regarding relevant compliance or export control approvals must be provided (if any).
5. **Abstract / Non-Technical Summary** (NUgrant online form; 250 word limit) Describe the situation that creates a need for this project and the purpose or rationale for the project. Include general statements describing the methods to be used, the expected outcomes/impacts, and the anticipated benefits. Provide information at a level that a scientist that *IS NOT* a specialist in your field will understand.
6. **Project Description:** (attached as a PDF file) Type size must be 11 points or larger. Margins must be at least 1 inch on all four sides and line spacing should not exceed 6 lines of text within a vertical space of 1 inch. The file must be in PDF format.

Include sufficient detail to convince reviewers of the project's scientific merit consistent with the requirements of the program area and **written in language understandable to scientifically trained non-specialists**. The application should also include information to demonstrate to reviewers that the proposed work is important/relevant to forests in Nebraska and *at least some aspect of the work* will contribute to an application for external funding. The project description is limited to 5 pages must include the following sections (e.g., sections a-g must be within 5 pages):

a. Statement of Issues and Justification:

- Provide rationale/significance for the project and why the work needs to be done.
- Describe the relevance and importance of the work to Nebraska's citizens and relevant businesses.

b. Related Current & Previous Work:

- A summary of findings from a REEIS search (formerly CRIS) is required (<http://www.reeis.usda.gov>). The REEIS search summary should identify work being conducted to meet objectives similar to yours and describe any potential overlap with previous or existing studies and your project. If the REEIS search provides limited results, describe findings from elsewhere (including your own preliminary studies) that are supportive of the feasibility for the proposed research.
- This section should help to define the problem under study and explain how the proposed work will supplement and extend previous work.
- A classical, in-depth literature review should NOT be included within the project description.

c. Goals/Objectives/Expected Outputs:

- List the overall goals, objectives, and expected outputs from the proposed studies.

d. Methods:

- Describe the methods to be used, with emphasis on the general scientific methods and any unique aspects or significant departures from usual methods (including data analysis, data management, interpretation of data, and dissemination of results).
- Identify specific research that the funds will target and how this research, *at least in part*, will enhance competitiveness for external funding. Clearly identify an external program/agency and timeline for submitting an application. It is not necessary that the entire scope of the project address an area for which competitive grants are available. However, it is necessary that some element(s) *can contribute towards increased competitiveness for extramural research funding*.
- Describe what these funds will accomplish that cannot be achieved through other means.

e. Target Audience:

- Provide a description of the target audience(s) that will be the focus of the project.
- Target audience(s) may include individuals, groups, market segments, or communities that will be served by the project.
- Where appropriate, also identify population groups such as racial and ethnic minorities and those who are socially, economically, or educationally disadvantaged.

f. Expected Outcomes:

- Describe what will be different (change in knowledge, actions, and/or conditions) if this project is successful.

g. Milestones and Timeline:

- Milestones are timeline-linked accomplishments that need to be completed before subsequent activities can begin, or can be completed.
- Include a timeline for completion of the proposed studies, by objective.

- h. Literature Citations** (references) are NOT included in the 5-page project description and may be included on one additional page. Include the one page of literature citations immediately after the Project Description in one PDF.
- i. Previous Impact of McIntire-Stennis or other ARD funding**—one additional page is allowed to describe previous impact of McIntire-Stennis or other ARD funding (excluding start-up packages) for the PD/PI and Co-PD(s)/Co-PI(s). Examples of other ARD funding include funding from ARD Strategic Investments, ARD Bridge or Revision, or ARD Strategic (miscellaneous) programs. Include the one page of Previous Impact immediately after the Literature Citations in one PDF.
- Faculty with previous McIntire-Stennis or other ARD funding (excluding start-up packages; see examples above) **must** include a description of how ARD funds have been leveraged to generate external funding for their forestry research programs.
 - Also include a brief description of outputs (publications, grants, etc.) and impacts (changes in knowledge, actions, and/or conditions) generated by previous support and a description of how these outputs and impacts have benefitted forest ecosystems in Nebraska and the region.
 - Those faculty that have not had previous McIntire-Stennis or other ARD funding do not need to complete this section.
- j. Strategic Plan for Forestry Research in IANR**—two additional pages are allowed to describe how the proposed McIntire-Stennis project fits within a 5-10 year strategic plan for forestry research in IANR. The strategic plan should include: specific research goals and objectives; a description of desired outcomes and impacts; and specific plans to leverage existing unit and/or IANR resources (facilities, equipment, human capital, funding, etc.) to obtain significant external funding from federal agencies, foundations, or for-profit entities to achieve the desired outcomes and impacts. Include the two-page strategic plan for forestry research in IANR after the Previous Impact section (if applicable) in one PDF.
- k. Letters of Support from Collaborators** (if applicable). Letters must describe the roles, responsibilities, and expertise of the individual(s) as well as contribution of resources (in-kind or cash) to the project. Include the Letters of Support from Collaborators section immediately after the Strategic Plan for Forestry Research in IANR section in one PDF.
- 7. Project Budget and Justification** (NUgrant online forms): The budget section should be prepared to cover the **annual** (up to \$75,000 per year) and **total** (up to \$375,000 total) amount requested for the entire project period (up to five years total). Download the OSP Budget Template (old format: <https://unl.app.box.com/s/guh578jtb4d88tgys3pmsk6n53rsgtfc>), enter budget information for the project, save the file as a PDF to your computer, and upload the PDF into your NUgrant application. Seek assistance from your grant specialist regarding allowable expenditures for McIntire-Stennis funds (e.g., McIntire-Stennis funds cannot be used to pay tuition remission). Information regarding current rates for employee/student benefits is available at: <http://research.unl.edu/sp1fringerates.shtml>. If funds are to be used for a full or partial GRA, PDs/Pis will be given up to six months beyond the award notification date to identify a suitable graduate student for the project. If a student has not yet been identified by this time, ARD will re-evaluate the status of the application for funding. Salary savings cannot be generated from state-funded, tenure-track or state-funded staff positions as part of this program. However, requests for salary support for other categories of faculty and/or staff may be included in these applications.

Funds from this program **must not** be used for construction, renovation, administrative assistance, international travel (including lodging or meals in a foreign country), summer salary for faculty, release time for teaching, or to purchase equipment with a purchase price of \$5,000 or more. Sub-awards outside the UNL system are not allowed; however, collaborators at other institutions may invoice expenses to this project. ARD will not accept invoices from outside the United States.

The Budget Justification section must include a general description of costs (salaries, operating, travel, publications, etc.) for each year of the project as well as a justification for these annual expenses.

Departments/Units of PDs/Pis will be responsible for expenditures beyond the approved budget. All funds must be expended by September 30, 2023. The USDA NIFA no longer allows no-cost extensions beyond the five-year project period.

REVIEW PROCESS: Members of the ARD Advisory Council or other scientific experts will review all applications and submit recommendations for funding to the ARD office. The NEAES Director and Associate Directors are federally authorized to approve participation in and make funding allocation decisions for McIntire-Stennis projects. This competitive process will inform the Director's decisions.

If all application submission and format rules are met, applications will be evaluated on:

- Scientific/technical merit, relevance to Nebraska forest ecosystems, and potential of the proposed research to have a positive impact on Nebraska forests or forest ecosystems (30 points) with emphasis on:
 - preventing, minimizing, or mitigating damage due to fire, insects, disease, drought, or climate variability;
 - tree canopy and planting contributions to issues of stormwater runoff (i.e., quantity & quality);
 - rural/urban tree canopy cover changes in response to community demographic shifts, particularly in rural communities.
- Ability of the proposed research to enhance the PD's/PI's competitiveness for extramural funding and the plan to obtain extramural funding (30 points);
- Qualifications of the project personnel (including collaborations, if applicable) and previous impact from McIntire-Stennis funding (if applicable; 30 points); and
- Budget and budget justification (10 points).

Applications that do not follow submission instructions or application format rules will not be reviewed.

Applicants are strongly encouraged to ask one or more colleagues to review their application prior to submission and to clarify questions with ARD Associate Dean, Deb Hamernik (DHamernik2@unl.edu).