WAES-Hatch and McIntire-Stennis
FY16 CALL FOR PROPOSALS
NOTE: FUNDING IS CONTINGENT ON FEDERAL BUDGET RESOLUTION

**New/Important details this year:

1) Opportunity for five-year proposals - see page 2 for details
2) Updated budget request guidelines - see page 4 for details
3) Expanded USDA priority goals - see page 7 for details
4) Submission of reviewer names - see page 10 for details

I. **Hatch Projects (individual investigator, multidisciplinary, and multistate)**
II. **McIntire-Stennis (M-S) Projects (individual investigator and multidisciplinary)**

- **Funding Period: FY 2016 (October 1, 2015 – September 30, 2016)**
- **Submission Deadline: Friday, September 05, 2014, by 4:30 p.m. to the WAES Office via WISPER. Time extension requests will not be granted.**
  - ***Proposals received after 4:30pm on September 05, 2014 will not be accepted***
- **Proposals must be submitted via the WISPER system.**
  - ***Proposals must have all approvals (Chair/Administrator/Co-PIs) for the proposal to be accepted.***
  - ***Attachments to the WISPER record must include the budget worksheets and the full proposal.***
  - ***Document type selected must be "Hatch" (This must be selected for Hatch, Hatch Multistate, and McIntire-Stennis proposals.)***
  - ***Proposals must be routed to Casey Hillmer***
- **Review Schedule: October-November, 2014**
- **Funding Decisions Announced: December 2014– January 2015**
- **For more information or assistance: contact Casey Hillmer at 262-2397, clhillmer@cals.wisc.edu; Angie Seitler at 261-1432, aseitler@cals.wisc.edu; or online - http://www.cals.wisc.edu/waes/**

Attachments (available on website listed below):

- **Hatch, Hatch Multistate, and McIntire-Stennis Project Information** (pp. 2-3)
- **Excerpts from Congressional Acts/USDA's Eight National Priorities (**pp. 6-7)
- **Areas of Identified Research Need for Wisconsin** (p. 8)
- **Nature of the Proposal Review** (p.9)
- **Proposal Submission Information/Format** (pp.10-13)
- **Policies and Procedures -- Formula (142) Funds** (pp.13-16)
- **Appendix A** (pp. 17-22)

- **Proposal Cover Page and Worksheets for Project Budgets** (see website: http://www.cals.wisc.edu/waes

*** Please review the Hatch Multistate and Integrated Activity Priorities before proceeding further.***

USDA funding is available without discrimination on the basis of race, color, national origin, sex, age, or disability.

In accordance with guidelines on the spending of federal formula grants, please refer to the original Hatch, McIntire-Stennis, and Animal Health legislation, as well as USDA's Eight National Priority Areas. Reviewers will evaluate the appropriateness of your proposal for formula grant funding using these guidelines (pgs. 6-7). Proposals of high scientific merit that do not justify relevance to formula grant funding are unlikely to be approved. **Hatch Multistate and projects that include an integrated activity (instruction/research or outreach/research) will receive higher priority. Integrated activities may include undergraduate research experiences, K-12 related instruction or outreach, and other public outreach efforts related to this work.** Funding is limited and less than 50% of proposals are likely to be approved.

Continuing this Year: CALS will consider a small number of projects for funding durations of five years. Five-year projects must address long-term scientific problems of identified critical importance to USDA. Applications for five-year awards must first be approved by the CALS Research Division. Submit a brief (one paragraph) description of the project, with strong justification and rationale, to: clhillmer@cals.wisc.edu, by August 8th. Projects funded for five years cannot be extended past the initial termination date.

Hatch and McIntire-Stennis Multidisciplinary Projects:

Many of the greatest challenges to agriculture and natural resources in the 21st Century are multi-disciplinary in nature. To address those needs, CALS Research Division encourages submission of multidisciplinary grant proposals to address research topics that span two or more disciplinary fields. Hatch, Hatch Multistate, and McIntire-Stennis Multidisciplinary projects can be requested for 1-2 years, if requesting two RAs, or up to five years, if requesting only one RA. **If requesting a five year proposal, prior CALS approval is needed.** Multidisciplinary projects can include co-investigators from the same department if the investigators represent different disciplinary fields. Co-investigators from other CALS departments are preferred, but will be allowed from non-CALS departments (UW-Madison only). A clear justification for the role of each investigator in the project must be included.

Hatch Multistate and Integrated Activity Priorities

Due to the requirement that we must commit 25% of our Hatch funding portfolio respectively to Multistate projects and to projects with integrated activity, these areas receive priority for funding. These can be individual investigator or multidisciplinary proposals. Information on Hatch Multistate projects (Formula Grants) can be found at http://www.cals.wisc.edu/waes.

Priority will be given to Multistate proposals with integrated activity. These projects must be of quality that would normally merit funding. We do expect to fund projects that do not address these requirements as we recognize the need to maintain balance and quality in our portfolio.

Multistate project proposals must fit within the project objectives of funded projects (National, NC, NE, S or W projects). Information on these projects can be found by logging onto the following website as a guest

member: http://www.nimss.umd.edu/, clicking on "Project Home" and then to the National, NC, NE, S or W links for lists and information on projects. See Appendix A for a list of eligible Multistate projects available.

Integrated activities may include undergraduate research experiences, formal inclusion of this work as part of an instructional program, K-12 related instruction or outreach, and other public outreach efforts related to this work including Extension related activities. These efforts must be formally addressed within the proposal.

Expectations of Formula Fund Grant Recipients

- Receipt of a Formula Fund Grant implies your tacit agreement to review the proposals of other applicants if and when requested to do so. Those consistently unwilling to do so should not apply for Formula Fund Grants.
- Receipt of a Formula Fund Grant requires annual submission of a USDA REEport report. Those delinquent in completing the REEport report jeopardize continued funding and may be disallowed to submit future Formula Grant proposals.

Hatch, Hatch Multistate, and McIntire-Stennis Project Information

Hatch funding is open to faculty members in CALS and SOHE. Faculty from other colleges and universities may be collaborators on a project. However, it should be demonstrated the needed expertise does not exist within CALS or SOHE and an appropriate matching commitment of resources is evident. Proposals should reflect external funding sources, if applicable.

Note that investigators may concurrently hold both an individual investigator Hatch grant or Hatch Multistate grant and a multiple investigator interdisciplinary Hatch grant. Investigators may not be the Principal Investigator on more than one individual project.

As in the past, the Hatch competition will continue to support a wide range of research. However, as a result of USDA's new National Priorities, each proposal **MUST** be strongly linked to one or more of the Eight National Priorities (see pg. 6 and 7) and **MUST** be clearly agriculturally-related. PIs with a question of fit with USDA's priorities should refer to the Manual of Classification for Agricultural and Forestry Research, Education, and Extension for a list of USDA's Knowledge Areas: http://cris.nifa.usda.gov/manual.html. It is the PI's responsibility to unambiguously establish the agricultural relevance of the work. Basic research on non-agricultural model systems (e.g., rodents, *Arabidopsis*) may be acceptable, but their relevance for agriculture must be clear.

Per USDA guidance –

"Every Hatch research project must have clear and documented relevance to agricultural science as part of the project. That relevance needs to be evident and explicit."

Proposals not addressing one or more of the Eight National Priorities will not be accepted for review. Each proposal is judged on appropriateness of the proposed research for formula funding, quality of the science, and likelihood of successful achievement of those goals.

Multidisciplinary proposals with multiple investigators will be considered in the open competition with the following considerations:

- High quality of research work proposed
- Special emphasis on problem solving for Wisconsin
- Realistic budgets (although these may be larger than individual investigator projects)
- Proposals should specify separate budgets for each investigator, with explicit division of work to be done by each team member. A composite budget should also be entered on the budget form.
- Evidence the multidisciplinary team has worked together on the proposal, including WISPER approvals of all involved. Include a section detailing how the team will function, and mechanisms for joint coordination.
- Plans to link the research to extension, outreach, or teaching activities should be clearly indicated.
- Demonstration of productivity from past and present formula funding for all collaborators.
- Typically, multidisciplinary projects are for a two-year term. Requests for three-four year projects must include a strong justification.

Types of support that may be requested: See table below for budget guidance
Graduate student training is central to the use of formula funding in CALS: alternative staffing requests (e.g., postdocs, technicians) will be not be considered. Each project should include support for one 50% graduate student and a small supply budget. Most individual awards will be in the range of $40,000 to $43,000/yr, including faculty salary. In order to maximize the number of projects we can support, budget categories for supplies, travel for the collection of research data, and labor should not exceed a combined total of $4,000- $5,000 per year, for an individual award. Costs associated with the use of the Agricultural Research Station (ARS) facilities for your research project should be included in the $4,000- $5,000 per year total.

A minimum of 5%, up to a maximum of 10%, of a faculty's effort/salary should be included in the proposal per year. Please be aware that the effort you indicate within the proposal will be payrolled (salary) effort on the project. **Note: there is not a faculty salary line on the budget worksheets; you need only list your percent of effort.

Hatch or McIntire-Stennis ***Individual*** *Proposal* ***(1-5 years of funding)****		*Hatch or McIntire-Stennis* ***Multidisciplinary*** *Proposal with One RA requested* ***(1-5 years of funding)****		*Hatch or McIntire-Stennis* ***Multidisciplinary*** *Proposal with Two RAs requested* ***(1-2 years of funding)***	
One RA	$21,224	*One RA*	$21,224	*Two RAs*	$42,448
Faculty Salary for PI	Varies – must equate to the percentage of effort committed to each year of the proposal	*Faculty Salary for PI*	Varies – must equate to the percentage of effort committed to each year of the proposal	*Faculty Salary for PI*	Varies – must equate to the percentage of effort committed to each year of the proposal
Fringe	Varies depending on faculty salary, student hourly, and LTE funding requests	*Fringe*	Varies depending on faculty salary, student hourly, and LTE funding requests	*Fringe*	Varies depending on faculty salary, student hourly, and LTE funding requests
Supplies and Other Expenses such as Student hourly, LTE, and Travel	Typically $4,000/yr Not to exceed$5,000/yr	*Supplies and Other Expenses such as Student hourly, LTE, and Travel*	Typically $15,000/yr Not to exceed $20,000/yr	*Supplies and Other Expenses such as Student hourly, LTE, and Travel*	Typically $5,000/yr Not to exceed$10,000/yr
Additional Notes:					
If total project costs exceed those allowable under the guidelines above, explanation regarding the source of complementary funding must be included within the Budget Justification section of the proposal.					
***Hatch and McIntire-Stennis proposals can request a total of 1-5 years of funding. Multidisciplinary proposals requesting 3-5 years of funding must include a strong justification and can request only one RA on the project. If requesting a five year proposal, prior CALS approval is needed by August 8th.**					

****Tuition Remission will be covered by CALS via alternative means.**

Please be aware that if your proposal is approved for funding, your budget is not necessarily approved as requested. Funding levels are approved several months prior to the start of the project. Funding approvals are contingent on funding availability and allowability (OMB Circulars, CALS Policies and Procedures, etc.) on Formula Grants. Requested items and/or funding categories are subject to disallowance.

Proposals related to official multistate projects (see list at NIMSS website – http://www.nimss.umd.edu/) are particularly encouraged. Proposals should relate the Wisconsin component to the overall project objectives and state the project number (or temporary number for proposed project). Given the funding mandates of the Hatch program that require 25% or more of our portfolio to be made up of multistate projects, these proposals will receive additional consideration for funding as well as travel to the multistate annual meetings. If approved by the CALS review panel, these projects will be on the WI funding list even if the regional approval of the project does not occur when associated with a temporary number.

Please refer to the following excerpts from original Congressional Acts and USDA's Eight Priorities in justifying appropriateness of your proposals:

Hatch Act

Act of March 2, 1887, Ch.314, 24 Stat. 440 7 U.S.C. 361a et seq.
As amended August 11, 1955, ch. 790, 68 Stat. 671
Excerpt from Section 2

"… It shall be the object and duty of the State agricultural experiment stations through the expenditure of the appropriations hereinafter authorized to conduct original and other researches, investigations, and experiments bearing directly on and contributing to the establishment and maintenance of a permanent and effective agricultural industry of the United States, including researches basic to the problems of agriculture in its broadest aspects, and such investigations as have for their purpose the development and improvement of the rural home and rural life and the maximum contribution by agriculture to the welfare of the consumer, as may be deemed advisable, having due regard to the varying conditions and needs of the respective States."

McIntire-Stennis Act

Act of October 10, 1962, Public Law 87-788, 76 Stat. 806, 16 U.S.C. 582a, et seq.
Excerpt from Section 7

" The term "forestry research" as used in this Act shall include investigations relating to " (1) Reforestation and management of land for the production of crops of timber and other related products of the forest; (2) management of forest and related watershed lands to improve conditions of waterflow and to protect resources against floods and erosion; (3) management of forest and related rangeland for production of forage for domestic livestock and game and improvement of food and habitat for wildlife; (4) management of forest lands for outdoor recreation; (5) protection of forest land and resources against fire, insects, diseases, and other destructive agents; (6) utilization of wood and other forest products; (7) development of sound policies for the management of forest lands and the harvesting and marketing of forest products; and (8) such other studies as may be necessary to obtain the fullest and most effective use of forest resources."

USDA's Research, Education and Economics Action Plan-
http://www.ree.usda.gov/ree/news/USDA_REE_Action_Plan_03-2014.pdf
The linke is to view USDA's document on their national priority areas for research, development and extension. The link is informational only.

The Hatch and McIntire-Stennis proposals should address one or more of the goals below *and* align with the individual Hatch and McIntire-Stennis program language (p. 6).

1. Global Food Security Food Availability: Crops and Agronomic Plants USDA supports research that develops food production systems that enhance crop health, while increasing the production capacity, efficiency and nutritional value of food. This research may span the range from genetic/genomic science, to field production, to understanding of agricultural markets. USDA also supports research reducing the environmental impacts of agricultural production by optimizing the use of inputs such as water, energy, pesticides, and fertilizer.

2. Global Food Security Food Availability: Livestock and Poultry USDA supports research that develops food production systems that enhance animal health, while increasing the production capacity, efficiency and nutritional value of food. For example, USDA supports research that improves feed and forage use efficiency in animals, while developing new varieties to mitigate losses from animal disease that impact livelihood and health of people. USDA also supports research on minimizing the environmental impacts of livestock and poultry production.

3. Climate Change and Energy Needs USDA supports research that generates knowledge to develop an agriculture system that maintains high productivity in the face of climate changes and reduces greenhouse gas emissions. This work will help producers to plan and make decisions in adapting to changing environments, sustaining economic vitality, and taking advantage of emerging economic opportunities offered by climate change mitigation technologies. USDA also contributes to the President's goal of energy independence by supporting science to develop biomass used for biofuels, design optimum forest products and crops for bioenergy production, and produce value-added bio-based industrial products

4. Sustainable Use of Natural Resources USDA supports research to improve soil, air and water resources while supporting agricultural and forest production on working lands.

5. Nutrition - USDA supports research to explore basic human nutrition, and to identify effective measures that guide individuals and families to make informed, science-based decisions that will promote health and reduce malnutrition in high-risk populations.

6. Food Safety USDA supports research to reduce the incidence of food-borne illnesses and provides a safer food supply by eliminating causes of microbial contamination and antimicrobial resistance, educating consumer and food safety professionals, and developing food processing technologies to improve food safety.

7. Education and Science Literacy USDA supports research on how to best recruit and educate the next generation of scientists and skilled workers for food, agriculture, and natural resources.

8. Rural Prosperity – USDA supports research that informs public and private decision-making in support of rural and community development.

Areas of Identified Research Need for Wisconsin

Within these national goals, states are asked to draw on stakeholder input to help direct use of formula funding. The following is a compilation of current needs and interests within the state. (Note: Research proposals from all topic areas will be considered, and ranked according to the criteria provided in this call for proposals. The following list is not all-inclusive.)

- Mechanisms of pest and pathogen resistance and safe and effective control, with minimum effects on environmental quality and human health.
- Effects of change in global climate, population pressures, or public policy on agricultural production, environmental resources, ecosystem management, and future land uses.
- Identification of socioeconomic or other forces that shape the viability of Wisconsin industries and employment including agriculture, bio-based industry, forestry, wildlife management, recreation, and other land uses.
- Research on food safety, nutritional health, environmental protection, and biotechnology and on providing information on dietary choices, lifestyle and community decisions.
- Sustainable agricultural and forestry production and processing systems that provides improved food safety and security, environmental protection, economically viable communities, protection of public goods, and human well-being. This need requires an understanding of basic life processes and model plant/animal systems in order to manage biotic systems for human use.
- Research and development related to agricultural processes with the potential to enhance the productivity and quality of livestock and food and bio-fuel crops in a sustainable manner.

Ideally, your proposal should address one of the priorities for Wisconsin in addition to one of the Eight National Priority areas. Your proposal must address at least one of the Eight National Priority areas.

Nature of the Proposal Review for Hatch and McIntire-Stennis Proposals

The Faculty Review Panel (FRP):
The Associate Dean for Research, in consultation with the Research Advisory Committee (RAC), selects members of the FRP. Two members of the FRP and ad hoc reviewers review each proposal. The two FRP members are designated as primary or secondary reviewer. The FRP members select two ad hoc reviewers. When possible, ad hoc members are CALS faculty. Ad hoc reviewers may not include CALS faculty who have a proposal under review. Other reviewers, both on and off campus, may be appointed as needed. The selection criteria for FRP members and ad hoc reviewers are scientific excellence, appropriate disciplinary expertise, and overall balance. No member of the FRP may have a proposal being reviewed under this call. When submitting a proposal, applicants may request an individual(s) be excluded from selection as a reviewer. Conversely, applicants may also suggest individuals for consideration as reviewers.

For Reviewers:
Reviewers are asked to critique and evaluate proposals in a constructive manner, identifying both strengths and weaknesses of the proposal(s) under review. Reviews should be concise and include comments addressing each of the following:

- An evaluation of the scientific significance of the objectives and alignment of project goals and funding source (appropriateness of the research problem to the Congressional Acts, USDA's Eight National Priorities and USDA's Knowledge Areas). The criterion of appropriateness is equally important to scientific merit and PI record of achievement.
- A judgment of the potential for solving Wisconsin problems is a key element of the formula funding guidelines.
- An evaluation of the research team's ability to accomplish the stated objectives, and the match between these objectives and available resources. For teams with multiple investigators, please include a plan of coordination across team members.
- Multistate and integrated activity priorities.

Review Process:

- Copies of the proposal are sent to two members of the Faculty Review Panel (FRP), and at least one ad hoc reviewer. Each will prepare a written review of the proposal assigned them, and rank it on a scale from excellent to unacceptable. The completed reviews are forwarded to the Research Division office and recorded anonymously upon receipt.
- Prior to a meeting of the FRP, the primary and secondary reviewer receive copies of all reviews to facilitate leading the discussion on proposals assigned them.
- At the meeting, the primary reviewer gives a brief description of the proposal, the principal investigator's background, and his or her assessment of the proposed research. The secondary reviewer will provide his/her evaluation and raise any points that may have been overlooked. In areas where the FRP has insufficient expertise in the proposed research, an ad hoc reviewer may be selected as a primary or secondary discussant. The primary reviewer provides remarks from ad hoc reviewers, and clarifies any confusing issues.
- After the FRP discusses each proposal, it is ranked for funding. This process provides for ranking reconsideration as other proposals are reviewed and ranked. Therefore, an inappropriately negative external review will *not* condemn a given proposal. After placement of all proposals, FRP members will review the compiled list to modify any inappropriate placements. The prioritized list is then submitted to the Associate Dean for Research. Approximately 50% of proposals are anticipated to receive funding approval.
- The primary reviewer on each proposal prepares a summary of all reviewer comments and FRP discussion. These materials, along with individual reviews and the summary, will be forwarded to applicants.

Proposal Submission Information/Format

The Faculty Review Panel, comprised of individuals with varying scientific backgrounds and expertise, reviews all proposals. Despite efforts to secure experts as outside reviewers, the panel discussion remains crucial to the ranking of proposals as outside experts may not always be available. Please include the following with your proposal:

- A scientific summary providing the necessary perspective for trained scientists who may not be experts in your area. This is essential for the panel to understand your proposed work. This summary should also identify the USDA priority your work relates to and include a brief justification.

- Justification of the proposed research for Hatch/Hatch Multistate/McIntire-Stennis funding must show the applicability to the specific topics set forth by Congress. Failure to provide this information will jeopardize funding even with sound scientific reviews.

Submission Deadline: Friday, September 5, 2014 by 4:30 p.m. to WAES Office via WISPER.
Proposals received after 4:30pm on September 5th, 2014 will not be accepted

NOTE: FUNDING IS CONTINGENT ON FEDERAL BUDGET RESOLUTION

Proposal Format:
The following format is intended to expedite proposal preparation and review, while providing information essential for identifying the best proposals. Principal investigators are urged to conform to format limits: reviewers will not be expected to read extended sections, addenda, or unpaginated sections. With rare exceptions, principal investigators will not be requested to submit revised proposals as part of the overall review process.

1. **Cover page and 200-word summary (1 page):**
   The proposal cover page must provide the following basic information: informative title, sponsor type (Hatch or McIntire-Stennis), names of the participating faculty; requested funding amount for each year, and a 200-word summary of the work undertaken. This cover page is distributed to all Faculty Review Panel members as part of the review process. This page is available for completion, with the budget worksheets (see below), on our website:
   http://www.cals.wisc.edu/waes

2. **Reviewer Names:** Please provide names and contact information (department and email address) for at least three independent reviewers you believe are especially well qualified to review this proposal. They should have no conflicts of interest with the proposal PI's. You may also provide names of reviewers whom you would prefer not to review this proposal and indicate why.

3. **Budget worksheets: See Types of Support that may be requested for guidance-Page 4**
   A budget worksheet must be completed for each year of funding requested, along with a cumulative summary integrated into the cover page. **Note: No budget line for faculty salary is needed. Enter only your percent of effort (5%-10%) that will be payrolled to the grant.**

   The Excel workbook is available on-line at:
   http://www.cals.wisc.edu/waes

   - The standardized Excel form is designed to expedite preparation of yearly budgets. **Begin by entering data for Year 1.** The project title, principal investigator, etc information on the Year 1 budget worksheet will automatically carry forward onto subsequent years, and the cover page. Category totals

on each year will also carry forward onto the cover page. Requests less than 4 or 5 years should leave unused years blank. These Excel documents are required in your submission.

- With the development of the Excel documents, we have attempted to simplify the budget submission process. The RA stipend and fringe rates on the forms are fixed for all years. You should use no more than a 4% yearly increase projection for all other types of personnel requested. The fringe rates should remain at the current rate across all years. No tuition remission is allowed for these budgets.

NOTE: Proposals should be prepared in a 12-point font, standard 1 inch margins, and not exceed 6 pages.

4. Title Page (1 page)

Include the following:
Project title – The title should reflect the objectives and scope of the project.
Personnel – All PIs and Co-PIs should be listed along with their department.

5 Background page (1 page)

A single page should be devoted to a description of the problem, and other relevant issues for a reviewer to understand the approaches utilized.

6. Justification (2 pages)

Two separate, one-page, justifications should be supplied:

Research: The research justification should specify the aims of the project in terms of growth in new knowledge and project applicability for Hatch/McIntire-Stennis funding. Applicants should be certain to link the proposed work to the congressional language and Eight National Priorities within this justification. *The authors bear the responsibility for convincing reviewers their project should be funded under these programs*. Multistate and integrated activity should be detailed if applicable. These areas will be considered in the review process.

The following must be included in your research justification:
1. The importance of the problem to agriculture and rural life of the state or region.
2. Reasons for doing the work (such as the needs the project will address) and doing it at this time.
3. Ways in which the public welfare or scientific knowledge will be advanced.
4. Fit of the proposed work with one or more of USDA's formal Knowledge Areas. The Knowledge Areas are described in the Manual of Classification: http://cris.nifa.usda.gov/manual.html.

Budget: The budget justification should specify the budget by category and defend the amount, type of funding, and time frame requested. The amount of support requested, coupled with justification, will be a significant factor in allocating scarce resources. Costs associated with the use of the Agricultural Research Station (ARS) facilities for your research project should be included in the justification. If the total project costs exceed those allowable under the budget guidelines table (pg. 5), explanation regarding the source of complementary funding must be included within the budget justification section of the proposal.

7. Proposal body (6 pages)

Six pages maximum, including figures, should be used to detail experiments or activities to be performed.

The following must be included:
1. Objectives: Clear, complete, and logically arranged statements of the specific results to be achieved by the project.
2. Procedure: A statement of the essential working plans and methods to be used in attaining each of the stated objectives. Procedures should correspond to the objectives and follow the same order. Phases of the

work to be undertaken should be designated and listed in a timeline format. Location of the work and the facilities and equipment needed and available should be indicated. Wherever appropriate, the procedure should produce data suitable for statistical analysis. The procedure should reflect careful planning and should provide flexibility for changes if they become necessary.

Methods to avoid obvious pitfalls should also be noted. A description of likely results and their interpretation/application is essential. An explanation should be provided detailing how the appropriate audience will be informed of results, and, whether that audience is other scholars, extension agents, farmers, etc.

8. Timeline: The budget worksheets include a separate page displaying a timetable. Use this to show the anticipated timeline for the major activities of the project.

9. Previous results (1 page):

A predictive factor in funding decisions is prior productivity of the principal investigator. This will partly be addressed in the curriculum vitae (see #10 below), but it is also very important to determine productivity and impact with previous Formula Grant awards. The PI should provide a clear statement of the results of his/her current or most recent Formula Grant support and include information on how that support has benefited his/her overall research program. In the case of research that focuses primarily on "new knowledge", this is best documented by the citation of publications in peer-reviewed journals that have cited the Formula Grant support in the Acknowledgments. Applied projects will also be judged by evidence of current or future impacts on society. An additional page can be used for each co-PI, if they have had recent Formula Grant support.

10. Management plan

For proposals with multiple investigators, include a plan for research coordination and a detailed allocation of project activities and budget items among the investigators. All investigators must sign the proposal cover page.

11 Resubmissions

For resubmitted proposals, indicate how previous comments were addressed in developing the revised proposal.

12. References

Provide a complete citation for each of the references cited in the proposal.

13. Curriculum vitae (2 pages)

A two-page CV for each investigator, focusing on recent publications, applications, invention disclosures, and patents, should be provided.

14. "Other Funding" page

The principal investigator should provide a summary of other current or pending funding. This should include PI(s), project title, funding source, dates of funding period, and direct costs per year. Where there is any conceivable overlap between these projects and the current proposal, the nature of the overlap should be explained here and justified in the appropriate justification section. Discuss the potential for future or supplemental external funding for this project.

15. Compliance

Approved projects require all compliance issues to be addressed with approvals for human subjects, animal care, and biological safety.

POLICIES AND PROCEDURES - FORMULA (142) GRANTS
HATCH, MCINTIRE-STENNIS & ANIMAL HEALTH
(Effective FY12-13 -- 10/01/12)

FISCAL RESPONSIBILITY:
Formula funded projects are subject to the provisions of the "Uniform Federal Assistance Regulations 7 CFR Part 3015" and "OMB Circular A-21". Copies of these documents are available upon request to the Research Division Office. In addition, formula funding must be spent in accordance with the rules and regulations set forth by the University of Wisconsin and by the State of Wisconsin.

Requisitions and all other forms of requests for expenditures of funds require prior approval from the WI Agricultural Experiment Station. This includes any form of direct billings such as photocopying, RARC services, etc. Please send all requisitions and requests for expenditures to waes@cals.wisc.edu.

USE OF ASSIGNED FUNDS TO A PROJECT:
Principal investigators should use formula funding assigned to their approved projects for necessary direct costs related to the project and as outlined in the approved budget sheet they receive from the Research Division. Dean's approval is required for any request to purchase capital equipment, request to purchase computer/printer and non-consumable related items, and request to exceed copy costs, or research supplies should be sent to **waes@cals.wisc.edu**.

WILL POST POLICIES

Appendix A-Current Multistate Projects

Please see the NIMSS website: http://www.nimss.umd.edu/ for current projects, as projects may have been renewed after the Call for Proposals was released.

NC007	Conservation, Management, Enhancement and Utilization of Plant Genetic Resources	09/30/2017	Active
NC100	Regional Research Coordination, North Central Region	09/30/2029	Active
NC140	Improving Economic and Environmental Sustainability in Tree-Fruit Production Through Changes in Rootstock Use	09/30/2017	Active
NC170	Personal Protective Technologies for Current and Emerging Occupational and Environmental Hazards	09/30/2017	Active
NC205	Ecology and Management of European Corn Borer and Other Lepidopteran Pests of Corn	09/30/2015	Active
NC1023	Engineering for Food Safety and Quality	09/30/2015	Active
NC1029	Applied Animal Behavior and Welfare	09/30/2016	Active
NC1030	Family Firms and Policy in Times of Disruption	09/30/2016	Active
NC1034	Impact Analyses and Decision Strategies for Agricultural Research	09/30/2016	Active
NC1100	Enhancing Rural Development Technology Assessment and Adoption Through Land Grant Partnerships	9/30/2015	Active
NC1183	Mycotoxins: Biosecurity, Food Safety and Biofuels Byproducts (NC129, NC1025)	09/30/2015	Active
NC1184	Molecular Mechanisms Regulating Skeletal Muscle Growth and Differentiation	09/30/2015	Active
NC1186	Water Management and Quality for Ornamental Crop Production and Health	09/30/2015	Active
NC1187	The Chemical and Physical Nature of Particulate Matter Affecting Air, Water and Soil Quality. (NCR174)	09/30/2015	Active
NC1189	Understanding the Ecological and Social Constraints to Achieving Sustainable Fisheries Resource Policy and Management	09/30/2016	Active
NC1190	Catalysts for Water Resources Protection and Restoration: Applied Social Science Research	09/30/2016	Active
NC1191	Weeds as Phytometers in a Changing Environment	09/30/2016	Active
NC1192	An integrated approach to control of bovine respiratory diseases (NC-1027)	09/30/2016	Active
NC1193	Assessing and addressing individual and environmental factors that influence eating behavior of young adults	09/30/2016	Active
NC1194	Nanotechnology and Biosensors	09/30/2016	Active
NC1195	Enhancing nitrogen utilization in corn based cropping systems to increase yield, improve profitability and minimize environmental impacts	09/30/2016	Active

	(NC1032/218)		
NC1196	Food systems, health, and well-being: understanding complex relationships and dynamics of change	09/30/2016	Active
NC1197	Practical Management of Nematodes on Corn, Soybeans and Other Crops of Regional Importance	09/30/2016	Active
NC1198	Renewing an Agriculture of the Middle: Value Chain Design, Policy Approaches, Environmental and Social Impacts	09/30/2017	Active
NC1199	N-3 polyunsaturated fatty acids and human health and disease	09/30/2017	Active
NC1200	Regulation of Photosynthetic Processes	09/30/2017	Active
NC1201	Methods to Increase Reproductive Efficiency in Cattle (NC1038)	09/30/2017	Active
NC1202	Enteric Diseases of Food Animals: Enhanced Prevention, Control and Food Safety	09/30/2017	Active
NCCC031	Ecophysiological Aspects of Forage Management	09/30/2015	Active
NCCC046	Development, Optimization, and Delivery of Management Strategies for Corn Rootworms and Other Below-ground Insect Pests of Maize	09/30/2016	Active
NCCC052	Family Economics	09/30/2015	Active
NCCC065	Indicators of Social Change in the Marketplace: Producers, Retailers and Consumers	09/30/2016	Active
NCCC134	Applied Commodity Price Analysis, Forecasting, and Market Risk Management (NCDC-198 and NCR-134)	09/30/2015	Active
NCCC167	Corn Breeding Research	09/30/2016	Active
NCCC170	Research Advances in Agricultural Statistics	09/30/2016	Active
NCCC211	Cover crops to improve environmental quality in crop and biofuel production systems in the Great Lakes and Upper Mississippi basins	09/30/2015	Active
NCCC212	Small Fruit and Viticulture Research	09/30/2016	Active
NCCC213	Coordination of Joint Work Products for Land Grant University Technology Managers Most Closely Associated with Agriculture and the Life Sciences	09/30/2017	Active
NCCC214	Biology, Etiology, and Management of Dollar Spot in Turfgrasses	09/30/2017	Active
NCCC215	Potato Breeding and Genetics Technical Committee	09/30/2017	Active
NCCC308	Nutrition and Management of Feedlot Cattle to Optimize Performance, Carcass Value and Environmental Compatibility	09/30/2018	Active
NCERA013	Soil Testing and Plant Analysis	09/30/2016	Active
NCERA059	Soil Organic Matter: Formation, Function and Management	09/30/2016	Active
NCERA101	Controlled Environment Technology and Use	09/30/2016	Active
NCERA103	Specialized Soil Amendments and Products, Growth Stimulants and Soil Fertility Management Programs	10/01/2017	Active

	(NCERA-103)		
NCERA180	Precision Agriculture Technologies for Food, Fiber, and Energy Production	09/30/2016	Active
NCERA184	Management of Small Grain Diseases	09/30/2017	Active
NCERA197	Agricultural Safety and Health Research and Extension	09/30/2015	Active
NCERA200	Management Strategies to Control Major Soybean Virus Diseases in the North Central Region	09/30/2016	Active
NCERA208	Response to Emerging Threat: Soybean Rust	09/30/2016	Active
NCERA210	Improving the Management and Effectiveness of Cooperatively Owned Business Organizations	10/01/2015	Active
NCERA218	Beef-Cow-Calf Nutrition and Management Committee	09/30/2016	Active
NCERA219	Swine Production Management to Enhance Animal Welfare	09/30/2016	Active
NCERA220	Biological Control of Arthropods and Weeds	09/30/2016	Active
NCERA221	Turfgrass and the Environment (was NCERA192)	09/30/2016	Active
NCERA222	Integrated Pest Management	09/30/2016	Active
NCERA223	Building Capacity in Issues Management in the Land Grant System	09/30/2016	Active
NCERA224	NCR-193: IPM Strategies for Arthropod Pests and Diseases in Nurseries and Landscapes	09/30/2017	Active
NCERA225	Implementation and Strategies for National Beef Cattle Genetic Evaluation	09/30/2017	Active
NE1010	Breeding and Genetics of Forage Crops to Improve Productivity, Quality, and Industrial Uses	09/30/2017	Active
NE1020	Multi-state Evaluation of Winegrape Cultivars and Clones	09/30/2017	Active
NE1040	Plant-Parasitic Nematode Management as a Component of Sustainable Soil Health Programs in Horticultural and Field Crop Production Systems	09/30/2016	Active
NE1044	Whole Farm Dairy and Beef Systems: Gaseous Emissions, P Management, Organic Production, and Pasture Based Production	10/01/2015	Active
NE1045	Design, Assessment, and Management of Onsite Wastewater Treatment Systems: Addressing the Challenges of Climate Change	09/30/2015	Active
NE1046	Management of Annual Bluegrass on Golf Courses: Improved Practices for Maintenance, Pest Control, and Viable Techniques for Transition to More Desirable Grasses	09/30/2016	Active
NE1047	Ecological Bases for Weed Management in Sustainable Cropping Systems	09/30/2016	Active
NE1048	Mastitis Resistance to Enhance Dairy Food Safety	09/30/2017	Active
NE1049	Community Health and Resilience	09/30/2017	Active
NE1201	Mycobacterial Diseases of Animals	09/30/2017	Active

NE1227	Ovarian Influences on Reproductive Success in Ruminants	09/30/2017	Active
NE1231	Collaborative Potato Breeding and Variety Development Activities to Enhance Farm Sustainability in the Eastern US	09/30/2017	Active
NE1962	Outdoor Recreation, Parks and Other Green Environments: Understanding Human and Community Benefits and Mechanisms	09/30/2017	Active
NECC1013	Strategies to Evaluate and Mitigate Ozone Impacts on the Structure and Function of Vegetation	09/30/2017	Active
NEERA1005	Sustainable Wood Energy	09/30/2016	Active
NRSP004	Enabling Pesticide Registrations for Specialty Crops and Minor Uses	09/30/2015	Active
NRSP006	US Potato Genebank: Acquisition, Classification, Preservation, Evaluation and Distribution of Potato (Solanum) Germplasm	09/30/2015	Active
S294	Quality and Safety of Fresh-Cut Vegetables and Fruits	09/30/2016	Active
S1048	Assessment of the Carbon Sequestration Potential of Common Agricultural Systems on Benchmark Soils Across the Southern Region Climate Gradient	09/30/2016	Active
S1049	Integrated Management of Pecan Arthropod Pests in the Southern U.S.	09/30/2015	Active
S1050	Assessing the Consumer Behavior, Market Coordination and Performance of the Consumer-Oriented Fruit and Vegetable Sector	09/30/2015	Active
S1051	Sustainable Practices, Economic Contributions, Consumer Behavior, and Labor Management in the U.S. Environmental Horticulture Industry	09/30/2015	Active
S1052	The Working Group on Improving Microbial Control of Arthropod Pests	09/30/2017	Active
S1053	Ecological and Genetic Diversity of Soilborne Pathogens and Indigenous Microflora	09/30/2017	Active
S1054	Biobased Fibrous Materials and Cleaner Technologies for a Sustainable and Environmentally Responsible Textile Industry	09/30/2018	Active
S1055	Biology, Impact, and Management of Soybean Insect Pests in Soybean Production Systems	09/30/2018	Active
SCC080	Plant Breeding	09/30/2015	Active
SCC083	Quantifying the Linkages Among Soil Health, Organic Farming, and Food	09/30/2015	Active
SERA006	Methodology, Interpretation, and Implementation of Soil, Plant, Byproduct, and Water Analyses	09/30/2017	Active
SERA027	Nursery Crop and Landscape Systems	09/30/2017	Active
SERA042	Enhancement of Leadership Capacity to Address	09/30/2015	Active

	Global Issues in the Food Systems through Coalition Development		
W2005	Parenting, Energy Dynamics, and Lifestyle Determinants of Childhood Obesity: New Directions in Prevention	09/30/2017	Active
W2008	Biology and Management of Iris Yellow Spot Virus, other Diseases, and Thrips in Onions	09/30/2017	Active
W2045	Agrochemical Impacts on Human and Environmental Health: Mechanisms and Mitigation	09/30/2015	Active
W2082	Evaluating the Physical and Biological Availability of Pesticides and Contaminants in Agricultural Ecosystems	09/30/2015	Active
W2112	Reproductive Performance in Domestic Ruminants	09/30/2016	Active
W2150	Breeding Common Bean (Phaseolus vulgaris L.) for Resistance to Abiotic and Biotic Stresses, Sustainable Production, and Enhanced Nutritional Value	09/30/2015	Active
W2173	Impacts of Stress Factors on Performance, Health, and Well-Being of Farm Animals	09/30/2016	Active
W2191	Elder Financial Exploitation: Impact on Families	09/30/2017	Active
W2192	Improving Safety and Health of Wildland Firefighters through Personal Protective Clothing	09/30/2017	Active
W3001	The Great Recession, Its Aftermath, and Patterns of Rural and Small Town Demographic Change	09/30/2017	Active
W3122	Beneficial and Adverse Effects of Natural Chemicals on Human Health and Food Safety	09/30/2017	Active
W3133	Benefits and Costs of Natural Resources Policies Affecting Ecosystem Services on Public and Private Lands	09/30/2017	Active
W3177	Enhancing the Competitiveness and Value of U.S. Beef	09/30/2017	Active
WERA020	Virus and Virus-Like Diseases of Fruit Trees, Small Fruits, and Grapevines	09/30/2016	Active
WERA027	Potato Variety Development	09/30/2015	Active
WERA039	Coordination of Sheep and Goat Research and Education Programs for the Western States	09/30/2015	Active
WERA040	Application and Utility of the Ecological Site and Condition Concept for Monitoring Rangeland Ecological Status in the Western U.S.	09/30/2017	Active
WERA060	Management of Pesticide Resistance	09/30/2017	Active
WERA066	Integrated Management of Russian Wheat Aphid and Other Cereal Arthropod Pests	09/30/2016	Active
WERA089	Potato Virus and Virus-Like Disease Management	09/30/2016	Active
WERA097	Diseases Of Cereals	09/30/2015	Active
WERA102	Climate Data and Analyses for Applications in Agriculture and Natural Resources	09/30/2015	Active

WERA103	Nutrient Management and Water Quality	09/30/2015	Active
WERA1007	Curly Top virus Biology, Transmission, Ecology, and Management	09/30/2016	Active
WERA1009	Systems to Improve End-Use Quality of Wheat	09/30/2017	Active
WERA1018	The Social-Ecological Resilience of Rangelands in Working Landscapes	09/30/2017	Active
WERA1021	Spotted Wing Drosophila Biology, Ecology, and Management	09/30/2017	Active
WERA1022	Meteorological and Climate Data to Support ET-Based Irrigation Scheduling, Water Conservation, and Water Resources Management	09/30/2017	Active