APPLICATION PROCEDURES AND INSTRUCTIONS
USDA NIFA ANIMAL HEALTH FORMULA FUND PROPOSALS
Due September 1, 2015

Content and Form of Application: The Research Plan (item #4, below) is limited to 10 pages. Font size shall be no smaller than 10 point and 15 characters per inch (Helvetica or Arial 12 pt. recommended). Margin size shall be no smaller than one-half inch.

1. COVER PAGE
   - Required Signatures: Principal Investigator, Co-Investigator(s) and Department Chair
   - Project Title: Be succinct and include specific keywords that describe of the project.
   - Amount Requested: Must not exceed $20,000
   - Cover Page Continued: Complete Project Classification, Keywords and Personnel FTEs

2. PROJECT SUMMARY/ABSTRACT(1-2 paragraphs).
   Provide a non-technical summary of your project that covers the main purpose of the project, the expected accomplishments, and anticipated benefits of the research.
   - What is the current issue or problem that the research addresses and why does it need to be researched? When answering this question consider a perspective that goes beyond the primary end-users of the science you are conducting. Why is this topic important to the larger community in terms of economics, community and environment as well as agriculture?
   - What basic methods and approaches will be used to collect and produce data/results and subsequently inform target audiences? This should be different from your objectives list. This section should explain, in plain, non-technical language what you intend to do.
   - What are the ultimate goals that the project hopes to achieve and what will be the general impact expected if the goals are met? What societal benefits may be realized?

3. BUDGET ($20,000 limit; itemize by main categories)
   A. Personnel: Describe and justify the role of each individual contributing effort on the project. If you are requesting funds for salary, you must also include appropriate fringe benefits (FT staff @ 35.37%; PT/student assistants @ 7.65%).
   B. Equipment: List only equipment items related to this specific project. (University guidelines specify “equipment” as items $5,000 or greater and an estimated useful life greater than one year.)
   C. Supplies: Estimate costs by category, ie glassware, chemicals, etc
   D. Animals: Estimate number, cost and per diem rate.
   E. Miscellaneous Costs: Include services, travel, etc. Do not include publication charges. You may request funds for publication when a manuscript has been accepted by the publisher.
4. **RESEARCH PLAN/PROJECT DESCRIPTION** (Items A-E limited to 10 pages total) –

Include the following subsections:

A. **Introduction and Specific Aims (2 pages)**
   - Brief introduction
   - **Long-term goals** - The major goal(s) of this project should encompass a broad perspective of what purpose, service, major achievement, or milestone this project will provide.
   - **Specific objectives** - Number each objective. Objectives should be measurable and attainable within the duration of the project and with the available resources.
   - **Expected outputs** that will be achieved during the life of this project. Outputs are activities, events, services, and products that reach people.
   - **Expected outcomes** – What accomplishments will help lead to a project impact? An outcome/accomplishment is defined as a significant change in knowledge, action, or condition. Outcomes are generally short, succinct statements that start with phrases indicating the occurrence of change. For example, "Increased profits from the sale of...
   - **Target audience(s) and efforts to reach them** - The target audience(s) should include all those that your efforts will reach over the course of the project, such as individuals, groups, market segments, or communities that will be served by the project. Efforts include acts or processes that deliver science-based knowledge to people through formal or informal educational programs. Examples include: formal classroom instruction, laboratory instruction, or practicum experiences; development of curriculum or innovative teaching methodologies; internships; workshops; experiential learning opportunities; extension and outreach.

B. **Background and Significance (2 pages)**
   - **Background**: Briefly review the most significant published work and describe the current status of research in this field.
   - **Rationale**: Present the rationale behind the approach to the problem and state the hypothesis. Any novel ideas or contributions that the proposed project offers should also be discussed.

C. **Preliminary Studies/Data (1 page)**. Preliminary data is not required, but helpful in reviewing the proposal.

D. **Research Design/Methods (4 pages)** – Include the following:
   - General scientific methods and unique aspects
   - How the results will be analyzed, evaluated, or interpreted.
   - **Efforts** (instruction, outreach, etc.) that will be used to cause a change in knowledge, actions, or conditions of a target audience.
   - How the output(s) will be **evaluated** and/or quantified for its impact on the intended audience(s)
   - How success of the project will be **measured** - key milestones and measurable or quantitative indicators of success.

E. **Future Funding Potential** (1 page) - State the potential for future funding and the likelihood of attracting outside funding.
5. REFERENCES
List selected publications of yours and/or others (including those in press) which relate to this proposal.

6. CURRENT AND PENDING SUPPORT
List any current, public or private research support (including in-house support), to which key personnel identified in the proposal have time commitments. List pending proposals under consideration or expected to be submitted in the near future. Identify proposals submitted in the last two years that were unfunded.

7. PRODUCTIVITY SUMMARY
If principal investigator has been awarded Animal Health funds in the past 5 years, list publications and grant applications submitted for extramural funding – include complete references for the publications and date, agency, title and status of the submitted grant applications.

8. VERTEBRATE ANIMALS
Indicate species and number to be used. Is the IACUC review pending or do you have an approval date?

9. LETTERS OF SUPPORT
Letters from collaborators willing to participate in the proposed research should identify the nature of the collaborative arrangement. (CVM co-investigators imply participation by signature on the cover page and do not require supporting letters.)

10. ATTACHMENTS
   A. Cover page/project classification (2 pages)
   B. Biographical Sketch for Principal Investigator and Co-Investigator(s) (maximum 2 pages each)
   C. Animal and/or biosafety approvals (if available). (Funds will not be released unless approved Animal Care and Use Protocol certification statement received in CVM Research Office. The USDA does not recognize Client Owned Animal Agreements as valid animal care and use protocols.)

The cover page must include all required signatures. Scan the signed cover page and submit it electronically, along with the complete proposal, to SachdevSL@Missouri.edu. PAPER COPIES ARE NOT REQUIRED THIS YEAR. If you have questions about the proposal, please contact Sherri Sachdev (882-2081) prior to submission. DUE: September 1, 2015, 4:00 p.m. Late submissions will not be reviewed or considered for funding.
USDA Formula Fund Awards: Evaluation Criteria

A.  Merits of Research (60%)

1) Significance of Problem (30%)
   1.0 – 1.4 = Outstanding (unsurpassed significance in advancing health/wellness)
   1.5 – 1.9 = Excellent (exceptionally significant, high impact, easily publishable)
   2.0 – 2.4 = Very Good (very significant problem, broadly recognized)
   2.5 – 3.4 = Good (recognized as important in livestock health/productivity/wellness, publishable)
   3.5 – 4.4 = Acceptable (unrecognized significance - marginal expansion)
   4.5 – 5.0 = Unacceptable (little perceived importance to the field, reproduces existing work)

2) Experimental Approach (30%)
   1.0 – 1.4 = Outstanding (impeccable experiment with an unsurpassed approach)
   1.5 – 1.9 = Excellent (superb experiment with outstanding design/techniques)
   2.0 – 2.4 = Very Good (significant experiment with definitive outcome)
   2.5 – 3.4 = Good (solid experiment that could be minimally improved)
   3.5 – 4.4 = Acceptable (good experiment that needs improvements)
   4.5 – 5.0 = Unacceptable (substantial flaw in experimental design/technical approach)

B) Potential for Career Enhancement (20%)
   1.0 – 1.4 = Outstanding (landmark advance in career)
   1.5 – 1.9 = Excellent (substantial advancement and growth in career direction)
   2.0 – 2.4 = Very Good (significant advance in career development)
   2.5 – 3.4 = Good (meaningful advance and helps define career path)
   3.5 – 4.4 = Acceptable (meaningful advance, consistent with career path)
   4.5 - 5.0 = Unacceptable (continuation of similar work without advancement)

C) Potential for Extramural Funding (20%)
   1.0 – 1.4 = Outstanding (high prospects of extramural funding, as evidenced by review)
   1.5 – 1.9 = Excellent (should be attractive to extramural agencies – identify?)
   2.0 – 2.4 = Very Good (similar in scope to work funded by extramural agencies)
   2.5 – 3.4 = Good (should be interesting to extramural agencies)
   3.5 – 4.4 = Acceptable (questionable interest by extramural agencies)
   4.5 - 5.0 = Unacceptable (likely to be ‘orphaned’ by extramural agencies)

Checklist for Success

✓ Does the main emphasis of the proposal fit within the scope prescribed by USDA? (see Research Scope of Funding in call letter)
✓ Did you follow the application instructions exactly and obtain all required signatures?
✓ Did you include necessary supporting documents - Biosketches, approvals, letters, etc.?
✓ Are the proposed materials and methods adequately described and do they answer the stated hypothesis and/or specific aims?
✓ Did you clearly describe how the data will be analyzed and interpreted?
✓ Did you discuss the limitations of the work, potential pitfalls, and possible solutions?
✓ Did you clearly describe the future funding potential, including examples of opportunities?
✓ Did you include letters of support from external collaborators and letters of cooperation for use of animals on private/commercial farms?
✓ Did you document progress on research previously funded by this program?
✓ Is the budget clearly and sufficiently justified?