College of Veterinary Medicine Animal Health Capacity Grant Funds:

As a part of the ongoing support for the College of Veterinary Medicine Signature Program research activities, the Office of the Associate Dean for Research is pleased to announce the availability of approximately $220,000 total available over two years ($110,000 per federal fiscal year) for two year Animal Health Capacity Grant fund projects beginning on October 1, 2018 and ending on September 30, 2020. Projects of all budget levels will be considered.

Full Proposal: DUE April 16, 2018

Background:

The scope of the research that may be conducted with USDA Animal Health Research funds is quite broad. It includes research to promote the general welfare through improved health and productivity of domestic livestock, poultry, aquatic animals, and other income-producing animals which are essential to the nation's food supply and the welfare of producers and consumers of animal products; to improve the health of horses; to facilitate the effective treatment of, and where possible, prevent, diseases in both domesticated and wild species which, if not controlled, would be disastrous to the United States animal industries and endanger the nation's food supply; to minimize livestock and poultry losses due to transportation and handling; to protect human health through control of animal diseases transmissible to humans; to improve methods of controlling the birth of predators and other animals; and otherwise to promote the general welfare through expanded programs of research and extension to improve animal health.

Animal Health Research comprises basic and applied studies on infectious and noninfectious agents that impair the normal state of the living animal body and/or that affect the performance of vital functions. This includes research to improve the health of domestic livestock, poultry, aquatic animals and other income-producing animals and to facilitate the effective prevention of diseases in both domesticated and wild animals, which, if not controlled, would endanger the livestock and poultry industries.

Also included is research to minimize transportation and handling losses; monitor the suitability of animals and animal products for human use; protect public health through control of animal diseases transmissible to humans and improve methods of controlling the birth of predators.

Studies are classified as Animal Health Research, if the studies relate directly to the health of a target livestock, poultry or aquatic animal species and includes laboratory studies, research on animal care as it relates to livestock health and well-being, investigations of metabolic diseases and reproductive diseases including endocrine dysfunctions such as anestrus. Application of molecular biology to animal health problems is included.

The intent is that these limited funds go to support the very best science studying important problems of animal health in Minnesota.

Please note that faculty in all Signature Programs are eligible to apply for funds but researchers who are using animal models to understand human disease must also address the benefit to animals.

The USDA must approve all new projects before funding can begin and funding is subject to continued formula funding from the USDA for the duration of the grant.
Eligibility

The PI must be a faculty member in the College of Veterinary Medicine. However, faculty members in other colleges, graduate students, post-docs, or any other qualified researcher are permitted to serve as a Co-Is or collaborators.

Please contact the CVM Research Office if you would like assistance with searching the USDA REEport system to see abstracts of other Animal Health approved projects.

Review Criteria

**Significance.** Does this study address an important problem that is relevant to the funding program? Does the project advance the priorities of the College of Veterinary Medicine Signature Programs?

**Approach.** Are the conceptual or clinical framework, design, methods, and analyses adequately developed, well reasoned, and appropriate to the aims of the project? Does the project have a reasonable chance to succeed?

**Innovation.** Is the project original and innovative? For example: Does it challenge existing paradigms or clinical practice or address an innovative hypothesis or critical barrier to progress in the field? Does the project develop or use novel concepts, approaches methods, tools, or technologies?

**Potential for External Funding.** Does the project have the potential for external funding? Is the plan for seeking extramural funds clearly described?

**Multidisciplinarity.** Projects of a multidisciplinary nature will be considered more favorably than single investigator proposals.
New Proposals

**Title Page** - Complete attached cover page and obtain required signatures.

**Project Summary** – 200 to 300 words, including summary of objective(s) and approach(s) on a separate page.

**Body of Proposal** – maximum of five pages, single-spaced

1. Significance of research
2. Review of literature

   Summarize the literature which represents the state of knowledge relevant to the proposed project and which provides critical background information related to the problem elucidated in the previous section, as well as for key research methods and/or techniques. Focus on the most important and more recent literature; if recent literature is lacking in this area, justify why it remains a compelling area for inquiry (e.g., significant new topics lacking information rather than those lacking scientific importance). Provide references for all citations in the Literature Review section. Double-check that all citations have references, and vice versa, before submission.

3. Objectives and hypothesis (Testable Hypothesis)
4. Plan of work -- approach, methodologies and timetable
5. Previous work of investigator(s) related to this proposal
6. Plan and timetable for extramural grant submissions -- list funding agency and time of grant submission.

**References**

**Biographical Sketch** (For all key personnel). Must include current and pending support to allow assessment of any scientific or budgetary overlap between projects

**Documentation and description of successful leveraging previous CVM formula or signature program funds.** Please work with the CVM research office staff to complete spreadsheet tracking outputs generated and funding received as a result of previously received formula fund/capacity grants and/or signature program research.— All applicants in CVM serving as PI or Co-I will be asked to document outcomes of all previous funding received from the Research Office. This information will be requested during the review process.

**Year 1 & Year 2 Budgets and Justification** – *Form included in this document.* Provide a budget justification on a separate page. Please contact the CVM research office with questions as to allowability of expenses. These funds may be used to support travel required to conduct research but no international or conference travel. Also, equipment may be requested and funded in proportion to the extent it directly benefits a project. Non-faculty salary expenses are allowed (excluding tuition benefits). Summer salary for nine month appointments unless justified is not allowed. **All personnel effort required to complete the project (paid and unpaid) must be detailed in budget/justification.**

**For Two Year Projects:**

Year 1 funds will begin on October 1, 2018 and must be expended by September 30, 2019.

Year 2 budgets will begin October 1, 2019 and will end on September 30, 2020. No expenditures may be incurred before the starting date or after the termination date of the budget period. **Unused funds from one budget period may not be carried forward to the next budget period.**

Formula funded projects are subject to the following award terms and conditions:


**Submission Process**

Please send your proposal as a single pdf via email using Animal Health Formula Funds in the subject line to vetres@umn.edu and submit a signed paper copy to the Research Office (440 VMC) by April 16, 2018.
Title of Proposal: ______________________________________________________________

Principal Investigator ___________________________ Dept/Affiliation__________________

Name/Signature ________________________________________________________________

Co-Investigator ___________________________ Dept/Affiliation__________________

Name/Signature ________________________________________________________________

Co-Investigator ___________________________ Dept/Affiliation__________________

Name/Signature ________________________________________________________________

Principal Investigator Affiliated Department Head (Signature)__________________________

Co-I Department Head (Signature)______________________________________________

Co-I Department Head (Signature)______________________________________________

Total funds requested: ___________ Year 1 ___________ Year 2

PROJECT SUMMARY

*This funding assumes continued receipt of USDA Animal Health Formula Funds. Projects may not be fully funded if USDA formula funds are not or are awarded at a reduced amount.
To ensure research compliance is satisfied, the following questions must be answered. For detailed information on any question, please visit the following link:

By signing the cover pages of this proposal, all investigators and department heads are indicating that the information listed below is correct.

**Does this project involve any of the following?**

- Human Subjects
- Animal Subjects
- Purchase/Use of Custom Antibodies produced in animals housed outside the University
- Human Blood, Body Fluids, or Other Potentially Infectious Materials
- Stem Cell
- Recombinant DNA, Infectious Agents or Biological Toxins
- Radioactive Materials and/or Ionizing or Nonionizing Radiation Producing Equipment
- Chemicals

If yes please answer the following:

<table>
<thead>
<tr>
<th>a. Human Subjects</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
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<tr>
<td>If yes, what is the status of the Human Subjects' Application?</td>
<td>Pending</td>
<td>Approved</td>
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<tr>
<td>Exempt Category:</td>
<td></td>
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<tr>
<td>Study Code Number:</td>
<td>Approval Date:</td>
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<tr>
<th>b. An Animal Subjects</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>If yes, what is the status of the Animal Subjects' Application?</td>
<td>Pending</td>
<td>Approved</td>
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<tr>
<td>Study Code/Protocol ID:</td>
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<td>Approval Date:</td>
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<th>c. Purchase/Use of custom antibodies that have been or will be housed outside the university?</th>
<th>No</th>
<th>Yes</th>
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<tr>
<th>d. Human Blood, Body Fluids, or Other Potentially Infectious Materials Help</th>
<th>No</th>
<th>Yes</th>
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<tr>
<td>If yes, do you have Blood-borne Pathogen training and immunizations?</td>
<td>No</td>
<td>Yes</td>
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<tr>
<th>e. Stem Cell</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Will your research involve:</td>
<td></td>
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<tr>
<td>Human embryonic stem (hES) cells</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Human embryos less than 14 days old</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Human induced pluripotent stem (iPS) cells, or other human stem cell sources, that are intended to make or contribute to an embryo</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>If you answered yes to any of the questions above please obtain approval for your protocol from the human Embryonic Stem Cell and human embryo Research Oversight (ESCRO) committee.</td>
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<tr>
<th>f. Recombinant DNA, Infectious Agents or Biological Toxins</th>
<th>No</th>
<th>Yes</th>
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<tbody>
<tr>
<td>If yes, what is the status of the Institutional Biosafety Committee Application?</td>
<td>Pending</td>
<td>No</td>
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</table>
g. Radioactive Materials and/or Ionizing or Nonionizing Radiation Producing Equipment Help
   _______No ________Yes
   If yes, do you have the appropriate permits and adequate radiation safety information?
   _______No ________Yes
   Department of Environmental Health and Safety (DEHS): (612) 626-6002

h. Chemicals
   _______No ________Yes
   If yes, do you have the appropriate chemical safety training and hazardous waste training records?
   _______No ________Yes

i. Subrecipients and Involvement with Other Outside Entities:

j.  
   a. Does this proposal include any outgoing subawards?
      _______No ________Yes  If yes, please enter names of Subrecipients.
   
   Does this proposal include any OTHER planned activity with the community or other outside entities (excluding subawards)?
   _______No ________Yes
   If yes, what type of entity/entities will be involved? (Select all that apply)
   __Other higher educational institution(s)
   __Governmental agency
   __K-12 schools or other non-higher education agencies
   __Healthcare organization
   __For-profit business and/or industry
   __Non-profit and/or registered 501(c)3 organization
   __Community group (e.g., neighborhood association, informal citizens group)
   __Other (please specify):

   If yes, please describe the primary role(s) of the involved entity/entities.

k. Financial and Business Conflict of Interest:
   
   a. Do you, or your co-investigators, or key personnel (i.e., anyone responsible for the design, conduct or reporting on this project), or a family member (yours or theirs) have a significant financial interest, OR business interest in a business entity that could benefit from the results of this project? See? For help with definitions.
      _______No ________Yes

   If yes, please indicate the most recent REPA # where these interests have been identified:
   REPA #
   Approval Date:

   Additional Comments - NOTE: Comments will display on and print on the PRF.
   Please do not include information you prefer to keep private:

   b. Do you, or your co-investigators, or key personnel have a familial connection OR financial or business interest (of any amount) with any proposed subrecipient or collaborator?
      _______No ________Yes

   If yes, please contact SPA for further direction.

   Additional Comments - NOTE: Comments will display on and print on the PRF.
   Please do not include information you prefer to keep private:
I. Inventions:

m. Is it likely that anything patentable (i.e. new, useful, or improved) will result from the current research project?

- No
- Yes

If this a renewal or continuing project, have any inventions been conceived or reduced to practice under prior research on this project?

- No
- Yes

Does this proposal contain private commercial or trade secret information? If yes, clearly identify the private commercial information in the text of the proposal.

- No
- Yes

Does the PI or any investigator have any active patent disclosures with the Office of Technology Commercialization relating to the work contemplated in this proposal?

- No
- Yes

n. Does this project involve University resources, space or staff from more than one department or college?

- No
- Yes

If yes, LIST DEPARTMENT/COLLEGE BELOW this form must be approved by all department heads and deans involved.

1. 
2. 
3. 
4. 
5. 

o. Program Income:

Is program income anticipated on this project?

- No
- Yes

If yes, indicate specific type(s) of program income by selecting one or more items from questions a through d below:

- From fees for services performed?
- From the use or rental of real or personal property acquired under this project?
- From the sale of commodities or items fabricated under the award?
- From license fees and royalties on patents and copyrights that may develop from this project?
<table>
<thead>
<tr>
<th>Senior Personnel (faculty)</th>
<th>Year 1</th>
<th>Year 2</th>
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<tbody>
<tr>
<td>Name, Role – Faculty Salary Not Allowed for 12 month appts – small amount of summer salary may be justified by 9 month appointments requiring effort for summer research activity related to project</td>
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<tr>
<td>Name/Role on Project and Effort</td>
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<td>Name/Role on Project and Effort</td>
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<tr>
<th>Salaries - Other Personnel (non-faculty) (Research Associates, Postdocs, Undergrad Students, Scientists, Technical, Other Professional)</th>
<th>Year 1</th>
<th>Year 2</th>
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<tbody>
<tr>
<td>Name/Role on Project and Effort Level (% effort/FTE)</td>
<td>salary</td>
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<td>fringe</td>
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<tr>
<td>Name/Role on Project and Effort Level (% effort/FTE)</td>
<td>salary</td>
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<td>fringe</td>
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<tr>
<th>Total Personnel Costs</th>
<th>Year 1</th>
<th>Year 2</th>
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*Travel – No conference travel – travel expenses required to conduct research only. No international travel.

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<tr>
<th>Materials and Supplies (computers purchase not allowed) - please show detailed calculations items/quantity/cost</th>
<th>Year 1</th>
<th>Year 2</th>
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<tr>
<th>Other Expenses (laboratory/scientific services, animal costs)</th>
<th>Year 1</th>
<th>Year 2</th>
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<tr>
<th>Total Costs Requested</th>
<th>Year 1</th>
<th>Year 2</th>
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**Budget Justification**

Budget and detailed itemized expense justification including detailed calculations for cost estimates.

Unallowable Expenses include: (Faculty salary unless 9 month appointment needing small amount of summer salary to conduct research, travel to scientific meetings, non-University of Minnesota subcontracts, purchase of personal computers).

**Description of all faculty and personnel roles on project and estimated of level of effort committed in support of project must be included**

Personnel: (Justify all paid and unpaid personnel, include percent time on project and description of role)

Travel:

Materials and Supplies:

Other Expenses