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| IACUC use only: |  |  |
| Protocol number:  | Click here to enter text. | Approval Date:  | Click here to enter text. |
| Date Received:  | Click here to enter text. | End Date: | Click here to enter text. |
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|  |  | Training Verified: [ ]  Yes [ ]  No |

Instructions:

* This is a Microsoft Word (MSWord) “form”. Use MSWord to fill in the information asked for in either the blanks or the box provided. You can put as much information as needed. Viewing may be easier in “Web Layout” under the view tab.
* Submit an electronic copy in MSWORD FORMAT of your completed protocol to iacuc@uark.edu and be sure to sign the appropriate form(s) by inserting your signature into provided boxes. All involved PIs must be included on the submission email.
* Please note that submitting an incomplete AUP form may result in a delay in processing. Your submission may be returned to you with a request for additional details.
* The PI is responsible for ensuring that any additional information/approval from Environmental Health and Safety (EHS), the Institutional Biosafety Committee (IBC), state and federal licenses/permits, etc., if necessary, is included with this submission. Failure to do so may cause a delay in protocol approval.
* The deadline for submission for full committee review is 12:00 Noon on the FIRST FRIDAY of the month. The protocol will be reviewed by the full committee the second Friday of the month.
* If you would like the protocol to be considered for Designated Member Review (DMR), please state the request in the submission email. The IACUC Program Manager will let you know if the protocol has been accepted for DMR. Please contact iacuc@uark.edu if you have questions regarding the DMR process and what qualifies.
* Once the protocol is reviewed by the IACUC, it will either be approved, disapproved, or a list of questions and comments to be addressed will be emailed to the investigator. The investigator will then need to make any necessary edits within the original protocol document and send the revised document to iacuc@uark.edu.
* Once all requested changes have been approved, the IACUC program manager will deliver the final approval notice via email.

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| **PRINCIPAL INVESTIGATOR** |
| **Principal Investigator:** | Click here to enter text. | **Department:** | Click here to enter text. |  |
| **Phone Number:** | Click here to enter text. | **Email Address:** | Click here to enter text. |  |
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| **PROJECT INFORMATION** | **Research** [ ]  **Teaching** [ ] Course # |
| **Title:** | Click here to enter text. |  |
| **Project Length (3 years maximum):** | Click here to enter text. |  |
| **Species**:  | Click here to enter text. | **Common name/strain:** | Click here to enter text. |  |
| **Permit(s) Required?** [ ] No [ ] Yes:  | Click here to enter text. |  |
| **Total animal number(s) by species** | Click here to enter text. |  |
| **All locations of animal use**: | **Housing:** | Click here to enter text. | **Procedure:** | Click here to enter text. |  |
| **Other (specify):** | Click here to enter text. |  |
| **Has this project been reviewed by the IBC?** | [ ]  Not applicable [ ] No [ ] Yes, IBC#: Click here.  |  |
| **Has this project been reviewed by EHS?** Note: EHS may need to review projects involving chemical agents or other factors that may not be reviewed by the IBC or Biosafety Officer. | [ ]  Not applicable [ ] No [ ]  Yes |  |
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| Does this study involve the use of controlled substances?  |  |  |
| [ ] No [ ] Yes: DEA license # and expiration date: Click here to enter text. |  |
|  Arkansas Dept. of Health license # and expiration date: Click here to enter text. |  |

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| **FUNDING** (check all that apply) |
| [ ]  NIH [ ] NSF [ ] USDA [ ] Private Industry [ ] U of A [ ] State of Arkansas[ ] Other (identify):Click here to enter text. |
| For CLAF and ENRC Housing: |
| Description of funding source (e.g., HHPR RIF; Retention; NSF Career; NIH R15): Click here to enter text. |
| Award Title: Click here to enter text. |
| Departmental Fiscal Specialist Name: Click here to enter text. Email: Click here to enter text. |
| Note: All cost centers affiliated with federal funding will be subject to a congruency check prior to use. |

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| **I. Abstract** (approximately 100-300 words) |
| Please provide, in **lay language**, * a concise but specific statement of the scientific objective for the proposed research,
* the rationale behind this objective,
* the species of animal to be used, and
* a quick overview of the procedures to be followed.

 This statement should stand alone and be comprehensible to a **non-scientist.**  |
| Click here to enter text. |
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| **II. Experimental Design** |
| Provide an overview of the experimental design, including:* Number of groups (include some sort of **table, list, chart**, etc., indicating treatment groups, etc.).

-Tables listing groups with respective treatments and numbers of animals/group are extremely useful* Number and sex of animals in each group and total (Total must agree with number in project information section).
* A schedule or timetable of the treatment(s) animals will be exposed to.
* Duration of treatments.
 |
| Click here to enter text. |
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| **Describe the humane endpoint for this study (subjected to a terminal procedure under anesthesia, euthanized for tissue collection, tumor volume, etc.):** |
| Click here to enter text. |
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| **III. Justification of Animal Numbers** |
| The number of animals used should be the minimum number that can be expected to provide valid results. [AWA 2.31 (e) (2); NIH p. 8] |
| **Provide a concise description of the data analysis plan, including a description of all key variables in the analysis.*** If appropriate, please make sure to indicate in some manner the number of levels for any categorical factor (typically reported as the “number of groups” for that factor).

Example: “Optical redox ratios collected from each mouse will be compared among disease groups (diabetic and non-diabetic) and time point (Days 1, 3, 5, 7, and 10) using a two-factor ANOVA with an interaction term.” |
| Click here to enter text. |
| **Based on the above, describe the method(s) used to determine the requested animal numbers. Include all parameters for the power analysis (e.g. significance level, power, effect size, etc.), if conducted:** |
| Click here to enter text. |
| Statistical analysis resources:[Introduction to Power Analysis – IDRE Stats](https://stats.idre.ucla.edu/other/mult-pkg/seminars/intro-power/)[G\*Power Manual](https://www.psychologie.hhu.de/arbeitsgruppen/allgemeine-psychologie-und-arbeitspsychologie/gpower) |

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| **IV. Level of Pain or Distress (**Check only one level) |
| This should be the most severe level to which the animals will be subjected during the study. **Please read these carefully.** (Level 1 corresponds to Category B in the USDA Pain and Distress Categories; Level 2 corresponds to Category C; Level 3 corresponds to Category D, Level 4 corresponds to Category E)  |
| [ ]  | **Level 1** – Animals being bred, conditioned, or held for use in teaching or research but not yet used for such purposes or observational behavior. |
| [ ]  | **Level 2** - Pain or distress will not be induced; or animals will only be used for injections, blood collections, or procedures causing nothing more than minor discomfort; or will be humanely euthanized prior to the procedures that induce pain or distress. If analgesics are used, the project is at least Level 3. |
| [ ]  | **Level 3** - Pain or distress will be relieved by appropriate therapy, e.g. sedatives, analgesics, anesthetics, or euthanasia. |
| [ ]  | **Level 4** - Drug intervention for pain or distress would interfere with the protocol. If this block is checked, specific justification MUST be provided below. |
| Note: Level 4 mandates responsibility on the part of the investigator to explore alternative procedures and consult with a veterinarian. Many of these procedures are specifically prohibited and therefore may result in withdrawal of federal funds.  |
| **Justification for Level 4 project:** Click here to enter text. |
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| **V. Surgical Procedures**  | **Location:** Click here to enter text. |
| If any of the methods/techniques listed below will be used, check the appropriate space and provide the requested details below. Note: Written records of surgery and anesthesia must be kept for each animal. Animals must be observed daily following surgery and observations must be recorded from the time surgery is completed until incisions are healed. These records must be made available for inspection by the IACUC.  |
| [ ]  | **None** |
| [ ]  | **Non-survival surgery** (euthanasia will be administered before recovery from anesthesia) |
| [ ]  | **Survival surgery** (animal will be allowed to recover from anesthesia) |
| [ ]  | **Multiple survival surgeries** (this requires explicit justification in Narrative) |
| **Describe Procedure(s)** (must use aseptic techniques)**:** Click here to enter text. |
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| **VI. Non-Surgical Procedures**  | **Location:** Click here to enter text. |
| If any of the methods/techniques listed will be used, check the appropriate box and provide the requested details below. Note: Written records of procedures and anesthesia must be kept for each animal. Animals must be observed daily following procedures and observations must be recorded from the time the procedure is performed until the end point of the study. These records must be made available for semi-annual inspection by the IACUC.  |
| [ ]  | **None** |
| [ ]  | **Non-surgical invasive procedures** (blood collection, catheterization, intubation, gavage, etc.). * Provide appropriate details (volume, site, frequency, needle gauge, etc.)
 |
| [ ]  | **Exposure of a living animal to a hazardous, toxic, and/or radioactive substance.** * Provide substance name, route of administration, dose, volume, frequency
 |
| [ ]  | **Exposure of a living animal to an infectious agent.** * Provide name of agent, means of exposure, and amount and frequency of exposure. Specify in “Euthanasia and Final Fate of Animal” section the criteria you will use to determine if euthanasia is necessary to relieve suffering.

Note, if this is checked, you must also check, either Level 3 or Level 4 pain in the previous section. |
| [ ]  | **Immunization** * Provide name of adjuvant(s) used; injection site; volume per site; frequency of injection; method, frequency, and volume of blood withdrawn (including anesthetic, if used).

Note: this does NOT apply to standard prophylactic vaccinations. |
| [ ]  | **Prolonged restraint*** Provide method, duration, frequency, procedure by which animal is adapted to restraint device.
 |
| [ ]  | **Food/water deprivation** * Provide duration, frequency, extent (total/partial), methods used to assess and monitor distress. Note: removal of food and/or water for 24 hours in preparation for surgery or some other procedure is NOT considered to be food/water deprivation.
 |
| [ ]  | **Abnormal environment** * Provide information on departure from normal conditions (temperature, humidity, light, duration, etc.).
 |
| [ ]  | **Aversive stimuli** * Provide type and intensity of stimulus, duration, justification for use.
 |
| [ ]  | **Hybridoma protocol.** * Provide priming agent, cells injected, schedule for collection of ascites, number of abdominal taps, size of needle used.

Important: Provide justification for use of the *in vivo* mouse ascites method versus the various *in vitro* methods currently available, providing adequate documentation.  |
| [ ]  | **Use of neuromuscular blocking agents (muscle paralytics) during surgery** * Provide a rationale for their use and explain how you will determine that adequate anesthesia is maintained.
 |
| [ ]  | **Use of death (without euthanasia) as an endpoint of the study/procedure.** * Provide justification why an earlier endpoint is not acceptable.
 |
| [ ]  | **Other** (describe below) |
| **Describe Procedure(s)**Blood draws/tumor injections/etc. should indicate method, volume and frequency: Be particularly detailed regarding any procedures that are: * invasive,
* involve stress, or
* cause tissue damage.

*Be sure this section explains (and agrees with) what is indicated in the Checklist bullet points*. |
| Click here to enter text. |
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| **VII. Medication and Anesthesia**  |  |
| For all medications, specify:* agent
* route of administration (e.g. intramuscular (IM), intraperitoneal (IP), subcutaneous (SC), etc.)
* dose (indicate mg of drug/kg of body wt. and include both concentration of the drug being used [usually expressed as mg of drug/ml of solution] and ml of solution/kg of body wt. to be given)
* frequency of administration (when appropriate)
 |
| **Pre-procedural medication and preparation:** Click here to enter text. |
| **Anesthesia and other medication during procedure:** Click here to enter text. |
| **Post-procedural medication and observation, including pain management:** Click here to enter text. |
| **Explain observations, procedures, and frequency that they are performed to determine animal is in the plane of anesthesia, remains in the plane of anesthesia, and has fully recovered from anesthesia:** Click here to enter text. |
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| **VIII. Euthanasia and Final Fate of Animal**  |
| Identify the method(s) of euthanasia to be used as part of this specific research project; it (they) must comply with the most recent [AVMA (2020) Guidelines on Euthanasia](https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf) |
| [ ]  | **Euthanasia not used as a part of this project, see mandatory section below** |
| [ ]  | **Overdose of anesthetic** Agent: Click here to enter text. Dose: Click here to enter text. Route: Click here to enter text. |
| [ ]  | **Inhalation of carbon dioxide**Secondary physical means (required): Click here to enter text. |
| [ ]  | **Physical means under general anesthesia** (identify the specific means that will be used; cervical dislocation, etc.): Click here to enter text. |
| [ ]  | **Physical means without anesthesia** * If done properly by trained personnel; the use of captive bolt pistol on large farm animals, cervical dislocation on chickens, and some other physical methods [such as gunshot] are permitted without justification (see AVMA 2020 guide)

State Method to be used here: Click here to enter text.* OTHERWISE, physical means without anesthesia *(such as cervical dislocation of mice)* can be used only when scientifically justified and requires specific written justification).

State and Justify these methods here: Click here to enter text. |
| [ ]  | **Other (identify here and describe):** Click here to enter text. |
| **MANDATORY FOR ALL PROTOCOLS** |
| * If an animal is to become seriously ill or injured, specify the criteria or criterion you will use to determine if, and when euthanasia will be used to relieve suffering:

Click here to enter text.* Method of euthanasia:

Click here to enter text.* If all animals will not be euthanized by the end of the project, indicate what will happen to these animals when the study has finished (e.g. returned to colony, released, etc.):
 |
|  Click here to enter text. |
| **Disposal of remains:** |
| [ ]  | **Incineration at University Farm** (disposal site for non-contaminated carcasses placed in the freezer at CLAF or ENRC) |
| [ ]  | **Other:** Click here to enter text. |
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| **IX. Animal Supply and Husbandry**  | **Housing Location:** Click here to enter text. |
| **Animal Source** |
| [ ]  | **Supplier** (all purchases must be from a licensed supplier)Name: Click here to enter text.Address: Click here to enter text. |
| [ ]  | **Transfer of animals from AUP#** Click here to enter text. |
| [ ]  | **Wild Caught** (permits must be provided to IACUC) |
| **Sexes used in this study:** [ ]  Male [ ]  Female [ ]  BothJustification for sex exclusion, if applicable: Click here to enter text. |
| **Anticipated start date:** Click here to enter text. |
| **Husbandry** (describe non-CLAF/ENRC housing in section B)**Note**: Husbandry must conform to the guidelines listed in the following: * [Guide for the Care and Use of Laboratory Animals (8th edition)](https://grants.nih.gov/grants/olaw/guide-for-the-care-and-use-of-laboratory-animals.pdf)
* [USDA Animal Welfare Act & Regulations](https://www.aphis.usda.gov/animal_welfare/downloads/bluebook-ac-awa.pdf)
* [PHS Policy on Humane Care and Use of Laboratory Animals](https://grants.nih.gov/grants/olaw/references/phspolicylabanimals.pdf)

The only exceptions are those protocols that are to be done under “commercial conditions”, these must be appropriately documented and approved.) The CLAF Manager may request additional information. |
| **A. CLAF and ENRC Housing** |
| **Type of housing preferred:** [Cage types and dimensions](https://research.uark.edu/documents/rscp/fy21-per-diem-rates.pdf) Click here to enter text. |
| **List any specific nutritional needs or restrictions?** *e.g.* medicated/non- medicated chow, nutritional profiles, certain brand etc. Click here to enter text. |
| **Type of bedding preferred:** Sani-chip is the standard bedding used. [Bedding types and per diems](https://research.uark.edu/documents/rscp/fy21-per-diem-rates.pdf)Click here to enter text. |
| **Describe any room parameters (temperature, humidity, etc.) outside of normal ranges for the animal model as specified by the** [Guide for the Care and Use of Laboratory Animals (8th edition)](https://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-use-of-laboratory-animals.pdf). Click here to enter text. |
| **List any enrichment restrictions/requests.** Click here to enter text. |
| **Do your animals need to be housed individually?** Note: Social animal species should be housed in stable pairs or groups of compatible individuals unless they must be housed alone for experimental reasons or because of social incompatibility. If you are using social species and they must be housed individually, please justify based on experimental requirements or veterinary medical concerns. |
| [ ]  | No, number/sex per cage: Click here to enter text. |
| [ ]  | Yes, please justify: Click here to enter text. |
| **Transport procedure (if applicable):** Click here to enter text. |
| **Other animal or husbandry information for CLAF personnel:** Click here to enter text. |
| **B. Non-CLAF/ENRC housing including cage or pen dimensions, number per cage (indicating area of floor space allotted to each animal), and a concise description of routine husbandry practices including cleaning, feeding (food type and frequency), and enrichment**: Click here to enter text. |
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| **X. Personnel**  |
| **TRAINING/ QUALIFICATIONS OF INDIVIDUALS PERFORMING WORK WITH ANIMALS****Any questions regarding this training should be directed to** (claf@uark.edu or iacuc@uark.edu).A. MANDATORY ONLINE TRAINING 1. All individuals working with animals should take the following modules from the CITI website ([www.citiprogram.org](http://www.citiprogram.org)) – login under “my institution”: a. *Working with the IACUC*B. PERSONNEL PERFORMING WORK AT CLAF OR ENRC ONLY1. Individuals working at CLAF or ENRC must complete the additional CITI Training module:a. *Post-Procedure Care of Mice and Rats in Research: Minimizing Pain and Distress*2. Individuals working with animals at CLAF or ENRC must complete a [health survey form](https://vpred.uark.edu/documents/rscp/claf-health-screening-form.pdf) and submit it to the Pat Walker Health Center. 3. All individuals who will perform work in the CLAF vivarium need to complete the CLAF Orientation prior to beginning work. Orientation is offered the first Wednesday of every month at 9:00am and the third Wednesday of the month at 1:30 p.m. This must be scheduled with the CLAF Manager in advance and is the responsibility of the individual. Individuals will not be permitted into the vivarium until this orientation is completed.**NOTE: All study personnel must complete the CITI module(s) and, as applicable, the Health Survey Form and CLAF Orientation prior to being granted facility access and performing procedures on animals.** |
| Please complete the following for all individuals involved in the study. Copy and paste as many times as needed or submit as an appendix. All members designated as “PI” or “Co-I” must be included on the submission email and will be notified of all changes regarding the protocol. Name: Click here to enter text.Phone number: Click here to enter text.Email address: Click here to enter text.[ ]  PI [ ]  Co-I [ ]  Technician [ ]  Student [ ]  Other:Click here to enter text.Role(s): [ ]  Animal care [ ]  Surgeon [ ]  Euthanasia [ ]  Other: Click here to enter text.Qualifications to perform above activities/planned training: Click here to enter text.CLAF access needed (room #, surgical suite, etc.): Click here to enter text.Training completed: [ ]  Working with the IACUC [ ]  Minimizing Pain and Distress [ ]  Health Screening[ ]  CLAF OrientationName: Click here to enter text.Phone number: Click here to enter text.Email address: Click here to enter text.[ ]  PI [ ]  Co-I [ ]  Technician [ ]  Student [ ]  Other:Click here to enter text.Role(s): [ ]  Animal care [ ]  Surgeon [ ]  Euthanasia [ ]  Other: Click here to enter text.Qualifications to perform above activities/planned training: Click here to enter text.CLAF access needed (room #, surgical suite, etc.): Click here to enter text.Training completed: [ ]  Working with the IACUC [ ]  Minimizing Pain and Distress [ ]  Health Screening[ ]  CLAF OrientationName: Click here to enter text.Phone number: Click here to enter text.Email address: Click here to enter text.[ ]  PI [ ]  Co-I [ ]  Technician [ ]  Student [ ]  Other:Click here to enter text.Role(s): [ ]  Animal care [ ]  Surgeon [ ]  Euthanasia [ ]  Other: Click here to enter text.Qualifications to perform above activities/planned training: Click here to enter text.CLAF access needed (room #, surgical suite, etc.): Click here to enter text.Training completed: [ ]  Working with the IACUC [ ]  Minimizing Pain and Distress [ ]  Health Screening[ ]  CLAF Orientation |

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| **XI. Statement of Compliance**  |
| As the individual responsible for this research or teaching project, I confirm that the information contained herein is accurate and, to the best of my knowledge, conforms to all applicable University, PHS, and USDA policies on the use of animals in research and teaching. I confirm that all individuals involved with the animals used in this project will complete the required training and will be instructed in the humane care, handling, and use of animals, prior to participation in the project, and I will have reviewed their qualifications. I agree not to proceed with any portion of this project or purchase animals until I receive written approval from the University of Arkansas Institutional Animal Care and Use Committee (IACUC). I agree that no substantive change will be made in the procedures contained in this proposal without prior written notification to and approval by the IACUC. I agree to allow inspection of my research facilities by members of the IACUC and the Animal Welfare Veterinarian and to comply promptly if informed of any violations of the University of Arkansas, Fayetteville's Policy on Animal Care and Use. I understand that failure to comply with the University of Arkansas, Fayetteville's Policy on Animal Care and Use will jeopardize the University's Animal Welfare Assurance on file with the PHS (and with it all federal funding for the University) and may ultimately lead to revocation of my privileges to conduct animal research at the University of Arkansas. |
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| Insert Principal Investigator signature image above. Date:Click here to enter text. |

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| **XII.** **Assurance Statements for Biomedical Research and Teaching** |
| **The regulations for the Animal Welfare Act (United States Department of Agriculture) and the Public Health Service require that protocols for biomedical research and teaching involving animals the following concerns be specifically addressed in writing by the Principal Investigator.** Items in brackets [ ] identify the source of the requirement [AWA = Animal Welfare Act regulations; NIH = NIH Guide for Care and Use of Laboratory Animals, 1996 edition]. |
| Animals should not be used if other methods exist that would provide substantially the same information. Indicate why the use of live animals is required in this research. [AWA 2.31 (e) (2); NIH p. 8]:Click here to enter text. |
| Justify your choice of species by listing some of the important characteristics of the species that make it suitable for use in the proposed research. Cost alone is not sufficient rationale. [AWA 2.31 (e) (2); NIH p. 8]:Click here to enter text. |
| The principal investigator submitting protocols for biomedical research should not unnecessarily duplicate previous experiments and must consider less invasive alternatives to procedures that may cause more than momentary or slight pain or distress to animals (i.e., Level 3 or higher). Provide a statement that a literature review has been carried out demonstrating that this research does not unnecessarily duplicate previous experiments, and that appropriate alternative research methods are not available for any proposed procedures that are Level 2 or higher. The database used must be identified (check below). [AWA 2.31 (d) (1) (I, ii, and iii); NIH p. 8] (Note, this requirement does not apply to protocols for teaching projects.)Click here to enter text. |
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|  | **Database** | **Date(s) of Search** | **Keywords used** |
| [ ]  | **Pubmed** | Click here to enter date. | Click here to enter text. |
| [ ]  | **Medline** | Click here to enter date. | Click here to enter text. |
| [ ]  | **Agricola** | Click here to enter date. | Click here to enter text. |
| [ ]  | **Index Medicus** | Click here to enter date. | Click here to enter text. |
| [ ]  | **Biol. Abstracts** | Click here to enter date. | Click here to enter text. |
| [ ]  | **Animal Welfare Information Center****(National Agricultural Library)** | Click here to enter date. | Click here to enter text. |
| [ ]  | **Other:**Click here to enter text. | Click here to enter date. | Click here to enter text. |
| [ ]  | **Other:**Click here to enter text. | Click here to enter date. | Click here to enter text. |

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| Insert Principal Investigator signature image above. Date:Click here to enter text. |