Alternatives and Duplication Literature Search Request Form

U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), National Agricultural Library (NAL), Animal Welfare Information Center (AWIC)

Last updated: March 2026

AWIC offers free 3Rs (replacement, reduction, refinement) alternatives and duplication literature searching services. These searches can help meet the Animal Welfare Act Regulations to consider alternatives to procedures that may cause more than momentary/slight pain or distress to the animals and ensure the protocol is not unnecessarily duplicative of previous experiments (9 C.F.R. 2.31 (d)(1)(ii-iii) (2026)).

All individuals requesting a literature search from AWIC should complete and submit this form to awic@usda.gov. All requests remain confidential and are **NOT** shared with anyone outside of the AWIC team.

AWIC will return literature search results within 10 to 15 business days from the day we confirm receipt of your request (unless otherwise noted). We will respond to let you know your request has been received. Please reach out to AWIC via email (awic@usda.gov) if you have any questions.

Name: _____

Phone number: _____

Email address: _____

If possible, please provide the animal use protocol when submitting a literature search request. Providing the protocol ensures that we have sufficient information to complete a thorough literature search:

- If a protocol is provided, only answer questions 1 – 3 and 12 – 14.
- If a protocol is **not** able to be provided, please complete the **entire** form below.

Please note that AWIC will search the past 20 years of literature when conducting the searches. If you would like a different range of publication years searched, please let us know in your email request.

1. Which literature searches do you need AWIC to complete? (select all that apply)
   Please keep in mind that while we do hand select citations, it will be up to you to review those citations, draw your own conclusions about the literature, and decide if those 3Rs methods are applicable to your research or not as well as if a study is duplicative of your proposed protocol or not.

   - [ ] Duplication
   - [ ] Alternatives or refinements to painful or distressful procedures
   - [ ] Non-animal models, in vitro methods, or new approach methodologies

2. Title of animal study protocol:

3. Lay summary and objective(s) of the study. If you are unsure how to write a lay summary, click here to learn more: https://pmc.ncbi.nlm.nih.gov/articles/PMC10465106.

4. General area of research (e.g. cardiology, toxicology, lipid metabolism, immunology, etc.):

5. Type of protocol (e.g. research, teaching/training, testing, etc.):

6. Animal species (e.g. pigs, rats, dogs, primates, etc.):

7. How many animals will be used in the study? How was this number determined (e.g. statistics, previous studies, etc.)?

8. List the specific names of any drugs/substances being used, which procedures the drugs/substances will be used for, and when/how often the drugs/substances will be given. Include all anesthetics and analgesics.

9. Describe the methods and procedures involving animals and the chronological order they will occur in. These procedures might include injections or blood collection, survival or terminal surgeries, animal restraint, euthanasia, or other painful procedures. Include all details regarding the procedures. Please be **descriptive** and provide **specific** details (i.e., procedure name, how the procedure will be conducted, how often the procedure will be conducted, if the procedure will cause pain or distress to the animal, any methods used to reduce or eliminate the pain/distress, etc.). **The more details you can provide, the easier it is for the AWIC team to conduct the searches needed.**

10. Describe how the animals will be housed (including any enrichments you are providing). Provide specific details. Please also describe if the animals will be handled, how they will be handled and how often.

11. Will animals be euthanized at any point during the study or after study completion? If so, how will the animals be euthanized? Are humane endpoints in place (if necessary)? A humane endpoint is the point at which an animal's pain and/or distress is terminated, minimized, or reduced using methods such as euthanasia, terminating the painful procedure, relieving the pain with treatment, or restoring a basic requirement.

12. List any keywords/terms related to the research/protocol that would be useful when conducting the search:

13. AWIC will search the following databases: PubMed, Web of Science, Embase, and EBSCOhost (includes AGRICOLA). If you have other databases you prefer AWIC searches, please state them below, and we'll try to accommodate this request if we have access to the database(s).

14. Please provide the search strings previously used for this protocol below (if applicable):