

PROCEDURES FOR

ARC PROJECTS

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Agricultural Research Center
Washington State University

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THE PROJECT SYSTEM, AN INTRODUCTION

The project system is fundamental to the operation of the Agricultural Research Center at WSU because it establishes budgets for salaries and other expenses and provides base projects for extramural support. It is the key ingredient in the management of all WSU agricultural research within the state. Without an active project, no money can be spent on supplies, no personnel can be paid, no grant or commission funds can be spent, and no travel can be authorized. In short, no funds can be received or expended.

The project system provides the basis for establishing the accountability of our research program. We will not continue to receive state, federal, or industry grants if the work that we do cannot be justified on the basis of its benefit to the citizens of this state and nation. The project system is unique in that research direction and goals are provided in a large part by researchers and users. Unlike most management systems, direction and policy decisions are influenced to a large degree by input that flows up the system rather than down.

Additionally, the system enables researchers to participate in a national network of research information that classifies research by subject of investigation, problem area, and academic discipline. This helps avoid duplication of research effort and provides information to other researchers throughout the United States. It also is a most useful tool, when properly used, for describing our research program to our constituents.

Strong emphasis is placed on maintaining an accurate up-to-date project system for both accountability and documenting the importance of research in sustaining healthy agricultural and natural resource sectors and the well-being of individuals within the state of Washington. The establishment and maintenance of such a system depends largely upon WSU researchers. Without the participation of agricultural scientists, the system cannot succeed.

The Hatch Act of 1887 established the State Agricultural Experiment Stations (SAES). Hatch funds are appropriated by Congress each year and distributed to the states on a formula basis, which includes a base allocation for each state plus an allocated amount based on the percentage of farm and rural population in the state compared with national farm and rural populations.

Wording of the Hatch Act, as amended, authorizes SAES to "conduct original and other research bearing directly on and contributing to the establishment and maintenance of a permanent and effective agricultural industry in the United States." The Administrative Manual for the Hatch (Experiment Station) Act as Amended also states "Research may be conducted on problems of local, state, regional, or national concern". (Source: personal correspondence, Henry Bahn to Vicki McCracken, 1997).

Standardized procedures for initiating projects and reporting their progress have been developed jointly by the SAES and Current Research Information System (CRIS), an integral part of USDA's Science and Education Resources Development—Cooperative State Research, Education, and Extension Service (SERD-CSREES).

The procedures require preparation of four forms in addition to the project outline. The CRIS forms are:

- a. AD-416: used to propose or revise a project and where the research is briefly described;
- b. AD-417: used to classify the research by research Knowledge Area, Subject of Investigation, and Field of Science
- c. Assurance Form CSREES-2008: used to inform CRIS whether human subjects, animals, and/or RNA or DNA will be used on the project. (If any of these are used, additional documentation of the current WSU approvals will be required)
- d. AD-421: used to report research progress on an annual basis and to terminate a project.

Detailed instructions for preparing these forms are online at CRIS called: "*Manual for Classification for Agricultural and Forestry Research, Education, and Extension - Revision VII - Classifications used in the Current Research Information System.*"

Find the manual at: <http://cwf.uvm.edu/cris/manuals.htm>. There are two versions: a 32 page .pdf version as revised in 2008 for viewing online and a 77 page version for printing – dated 2005.

The CRIS Codes in the manual are needed for completing the AD-417 form. However, you will be able to link to the codes directly from the AD-417 form online as well.

Each unit of the Agricultural Research Center (ARC) should obtain copies of these manuals from the web and have them available for the faculty.

DEVELOPING A PROJECT

At all times, research faculty must be an active member of one or more of the following ARC projects: (a) individual, (b) team, and/or (c) multistate research.

A new faculty member with a partial or full-time research appointment should generally plan to develop and submit a research project through department or research center channels to the ARC within **4 months** following employment. It is recognized that new employees must be allowed adequate time to explore and identify research that is needed before beginning the process of project development. New faculty members should seek the counsel and guidance of their department chair/center director soon after employment concerning the development process. An approved ARC project is necessary in order to pay the **salary** of that faculty member and the associated staff and graduate students.

Researchers who wish to form teams to explore and identify research areas may submit one ARC project to cover all members of the team. The lead researcher will be responsible for gathering information from each team member to write the initial proposal, the yearly progress reports, and the renewal proposals. Research teams may be composed of members from within one or more departments and must have a research appointment through the ARC. After the proposal and CRIS forms have been approved by the USDA, team members may elect to end their individual ARC projects. The research portion of each team member's salary will be assigned to that project. Therefore, it will be incumbent on each team member to ensure that project renewals are sent to the ARC in a timely manner well before the termination date of their project.

Once an ARC project has been approved for a new faculty member, that project number can be used until retirement providing the revised project proposal is submitted to the ARC two months before the termination date. The process and timeline for submitting a new and revised proposal is the same.

The researcher should plan adequate time for the initiation or revision of a project. **New or revised projects should reach the ARC office at least 60 days before the work is actually to start.** Failure to prepare new project proposals or to revise existing ones on time increases the work of the department/center clerical staff, the ARC staff, and personnel and finance offices. (A sample timeline for submitting paperwork for Hatch, McIntire-Stennis, and Animal Health projects is shown on page 38 of this document.) Revision of projects is as important as the annual progress report. No funds can be expended on projects that have passed their termination date, resulting in faculty and staff salaries and operations being charged temporarily to research administration. Obviously, such charges do not accurately report research and/or administrative costs and cause considerable additional work as noted above. Please submit project revisions at least 60 days in advance of termination date. **(If the termination date has passed, the researcher will have to terminate the project and submit a new project.)**

The research project (new or revised) must follow the specified project outline described on pages 7-8. The amount of detail provided should be adequate to clearly describe the

research effort but in many cases is less than that required for most competitive grant proposals.

Consult Your Chair/Center Director

The first step to take in developing an ARC research project is to discuss the research need/opportunity with the department chair or center director. This allows them to determine at an early stage whether the proposed project fits into the department's or center's research objectives and priorities and if resources required to conduct the proposed research are available. The researcher needs to initiate a CRIS search and any other relevant searches at this time if they have not already been made.

CRIS Search

The Current Research Information System (CRIS) is USDA's computer-based documentation and reporting system for on-going agricultural and forestry research conducted primarily within the USDA/state agricultural experiment station system. CRIS information should be used to plan research, avoid costly duplication, determine current areas of emphasis, and establish valuable contacts.

Information stored in the CRIS computer system can be obtained two different ways: on the web or by submitting an e-mail request.

To do a CRIS search online, use the following URL: <http://cwf.uvm.edu/cris/>

Then follow these steps:

- Select: **CRIS Search** (on the tool bar)
- Select: **Assisted Search** (follow the instructions)
- Select: **Search** (the red typed **Records retrieved** area will show if the search found any results with the words or phrases entered above)
- If one or more records are retrieved, scroll down and select **Display Results**:
 - The screen will display basic information about the first 10 projects using the keywords you provided. You may click on "More" beside any of the projects to obtain additional information about that project including objectives, approach, and last progress report.
 - Also, you may click on the researcher's name and you will obtain information about all of that researcher's projects that are a part of the CRIS website.

If you prefer to have CRIS do the search for you, you may submit your request electronically to cdeckers@csrees.usda.gov with the following information:

- Your full name
- Washington State University
- Mailing address
- Phone number
- Subject or area of interest to be searched -- Include statements describing specific topic. Include particular resources, commodities/subjects of investigation, or ideas that form the core of the request. Is the search to be broad or narrow in scope?
- Keywords

Typically the search will be done within two weeks. Use the results to prepare the outline.

Describe the Project

The second step is to describe more specifically the proposed project and discuss it with the chair(s), center director(s), and researcher(s) of cooperating department(s), if any. Obtain advice on statistical design for the proposed research, if needed, at this stage.

Develop a Project Outline

The third step is to develop a project outline. The researcher (now called the project leader/principal investigator) **should** follow the format presented below.

Title

A brief, clear, specific description of the subject of the research is required (limited to 175 characters). The title, used by itself, should give a good indication of the scope of the project. For example, titles like "Potato Fertilizer Requirements" are generally too broad. More specific boundaries of the project should be shown with titles such as "Manganese Requirement of the Potato."

Personnel

List participating faculty members within the College of Agricultural, Human, and Natural Resource Sciences. Also name cooperators from other colleges or states. Do not list graduate students, research technicians, or post-doctoral associates.

Justification

In this section, present:

1. The importance of the problem to agriculture, natural resources, and rural life of the state and region;
2. Reasons for doing the work, such as the needs the project will fill and the importance of doing the work; and
3. Ways in which public welfare or scientific knowledge will be advanced.

Previous Work and Present Outlook

Write a brief summary of pertinent, previous research on the problem (citing the more important and recent publications from the CRIS search as well as from WSU), the status of current research, and the additional information needed to which the project is expected to contribute. Append literature citations at the end of the project outline.

Objectives

Present a complete, logically arranged, numbered list of the specific objectives of the project.

Procedure

State the essential working plans and methods to be used in attaining each of the stated objectives. The procedures should correspond to the objectives and follow the same order. Designate the phases of the work to be undertaken. Indicate the location of the work and the facilities and equipment needed and available. Use a procedure that will provide data suitable for statistical analysis wherever appropriate. In the statement on procedure, show that the research has been carefully planned and

provide for changes when they are necessary to improve the work. Be as specific as possible about the statistical design for the proposed research.

Probable Duration

Estimate the maximum time likely to be required to complete the research originally planned and to publish the results. Whenever any material change in the objectives of a project is advisable, prepare a new or revised project outline. Revise the project outline if a major change in procedure results during the research. Projects aligned with Multistate Research or grants have specific termination dates; all others cannot be longer than five years.

Financial Support Needed

Present estimated annual allotments, by funds, to salaries and maintenance. Base the estimates on analysis of requirements for labor, equipment, supplies, travel, and other operating expenses. This information is used to assess the resources required for accomplishing the proposed research. **Acceptance of the proposed research does not represent a commitment by the ARC to directly provide these resources.** In nearly all cases, the PI will be expected to obtain most of the needed funding through grants and contracts.

Expected Impacts

The SAES conduct research with the goal of providing information and technology essential for the future success of agricultural and natural resource based industries and the well-being of society, particularly in rural areas. The experiment stations continually need to demonstrate greater accountability in their research efforts.

Conducting research that is relevant to the clientele and getting information and technology from these programs into the hands of those who can utilize it is critical to the success of the experiment station.

This is a short section (1-2 paragraphs, maximum) written in LAY TERMS that summarizes the practical relevance of the proposed research (e.g., what are the benefits, who will benefit, etc.), and identifies specifically how the results will be disseminated so that the research will reach the potential beneficiaries.

Human or Animal Subjects or DNA/RNA Use (Assurance Statement CSREES-2008)

If the project involves research or data collection with human subjects (including experiments, surveys, questionnaires, interviews, or observation of behavior), animal subjects, and/or DNA/RNA, extra forms must be requested and processed. Go to the website <http://www.research-compliance.wsu.edu/>

1. **Human Subjects.** For the Human Subject Approval Form, Institutional Review Board (IRB), go to the website <http://www.irb.wsu.edu/>, concerning using humans as part of a research project and using human subjects. Or contact the Office of Research Assurances Institutional for further information at 509-335-7183.
2. **Animal Subjects.** For the Animal Subjects Approval Form, Animal Care and Use Committee (IACUC), go to the website <http://www.iacuc.wsu.edu/> . Or contact the Office of Research Assurances for further information at 509-335-7183.

3. **Use of DNA/RNA.** For the Biosafety of Recombinant DNA Approval Form and WSU Biosafety Policy and the “Memorandum of Understanding and Agreement for the Conduct of Recombinant DNA Experiments and/or Use of Infectious Agents,” Institutional Biosafety Committee (IBC), go to the website <http://www.biosafety.wsu.edu/>. Or contact the Office of Research Assurances Institutional for further information at 509-335-7183.

If applicable, a copy of the approval memo from the appropriate committee MUST accompany the completed project packet sent to the ARC.

Peer Review

The next procedural step is the peer review. The principal investigator transmits the project outline to the departmental chair or center director, who selects a review committee of three to five knowledgeable researchers (they do not all have to be from WSU). If cooperating departments are involved, representatives from all relevant disciplines must be included. At least one reviewer should not be a cooperator on the project.

The peer review of all new or revised projects is an important step in maintaining high-quality, productive research programs. The review provides the project leader an opportunity to have competent scientists objectively critique the proposed research.

The Science and Education Resources Development—Cooperative State Research, Education, and Extension Service requires verification of peer review to be submitted with new or revised project requests. To comply with this requirement, a **Peer Review Compliance Report** must accompany each new or revised project submitted to the ARC office. A sample Peer Review Compliance Report is shown on page 42 of this booklet and may be copied. This document may be revised as deemed appropriate for the particular unit.

Some guidelines for reviewing research projects are given below. Using these to the extent that is practical for a particular project will help provide a uniform format among reviewers.

1. Does the outline clearly state the problem to be solved or specify the nature of the knowledge to be sought?
2. Are the objectives clearly stated and sufficiently specific that accomplishment within a reasonable project duration can be expected?
3. Do the procedures suggest reasonable approaches to the accomplishment of each objective?
4. Does the outline give evidence of the leader’s familiarity with **essential** literature, concepts, and methods relevant to the research?
5. Are the experimental materials, methods, samples, and criteria of measurements likely to provide interpretable results?
6. Are adequate provisions made for the scientific competencies essential to the conduct of the research?
7. Are definable benefits being sought; and, if so, are they attainable from the successful pursuit of this research? Have appropriate means been identified for disseminating the research findings?

8. Is the project likely to contribute significantly to the cumulative knowledge of the discipline and the targeted clientele?
9. Does the proposed study complement on-going research in the department or in other departments at WSU? Have relevant individuals or units been contacted for possible cooperation?

See page 41 for a suggested letter requesting a peer review.

Consider the Reviewer's Comments

Next in the procedure is consideration of the reviewer's comments and suggestions. If the chair or the project leader wishes to do so, hold a meeting of the peer reviewers and scientist(s) who prepared the project. The project leader can then respond to recommendations and criticisms of the reviewers.

Prepare a Final Draft

The next step is to prepare a final draft of the proposed project. Include recommendations from the reviewers that have not been resolved by the project leader. It is the responsibility of the chair to insure that all recommendations have been carefully considered, incorporated, or rejected with adequate justification in the final draft.

Preparation of the CRIS Forms

CRIS Documentation

Prepare a draft Research Resume (AD-416), Classification of Research (AD-417), and Assurance Statement CSREES-2008 for input to CRIS. The Department/Center support person at your location can assist as needed. When you are finished, print out the forms for signature by the Dept Chair/Director and your department support staff will send them to the ARC for further review.

USDA/CRIS requires that all the information for projects be submitted to them by the ARC via the internet. Ellen Yeates in the ARC will make the final submission under ARC's authority. Editing can still be done up until this point. Please call if you are locked out and need to do any editing after you confirmed all data on the last page of any form. It can be unlocked for your continued use.

Following are instructions on logging-in to CRIS and completing the forms. To assist you, there are screen prints of the pages you will see as you move through the process.

Ag Research Center, Washington State University
CRIS AD-416 RESEARCH RESUME
Use the World Wide Web to do this report
For assistance, please contact Ellen Yeates
eyeates@wsu.edu

Start at the CRIS Forms Assistance homepage located at <http://cwf.uvm.edu/cris/>

USDA United States Department of Agriculture
Current Research Information System

Forms Assistance

Home About Us CRIS Forms CRIS Manuals CRIS Search News Help Contact Us

Enter Forms

- ▶ [Work Unit Description \(AD-416 / AD-417 / 2008\)](#)
- ▶ [Accomplishments Report \(AD-421\)](#)
- ▶ [Funding Report for NSCG \(AD-419\)](#)
- ▶ [Funding Report for FS \(AD-418\)](#)

Manage Data

- ▶ [Administrative Functions](#)
- ▶ [Program of Research](#)
- ▶ [Reporting Checklist](#)

You are here: Home

Welcome to the CRIS Forms Assistance Web site. This is designed to help guide you in completing and submitting the documentation for USDA-funded projects to be recorded in the Current Research Information System (CRIS).

Messages

Please read this reminder message about re-submitting DEFERRED PROJECTS and ADDING PROJECTS to your checklist -- See NEWS for details.

--> Info for new CRIS administrative site contacts

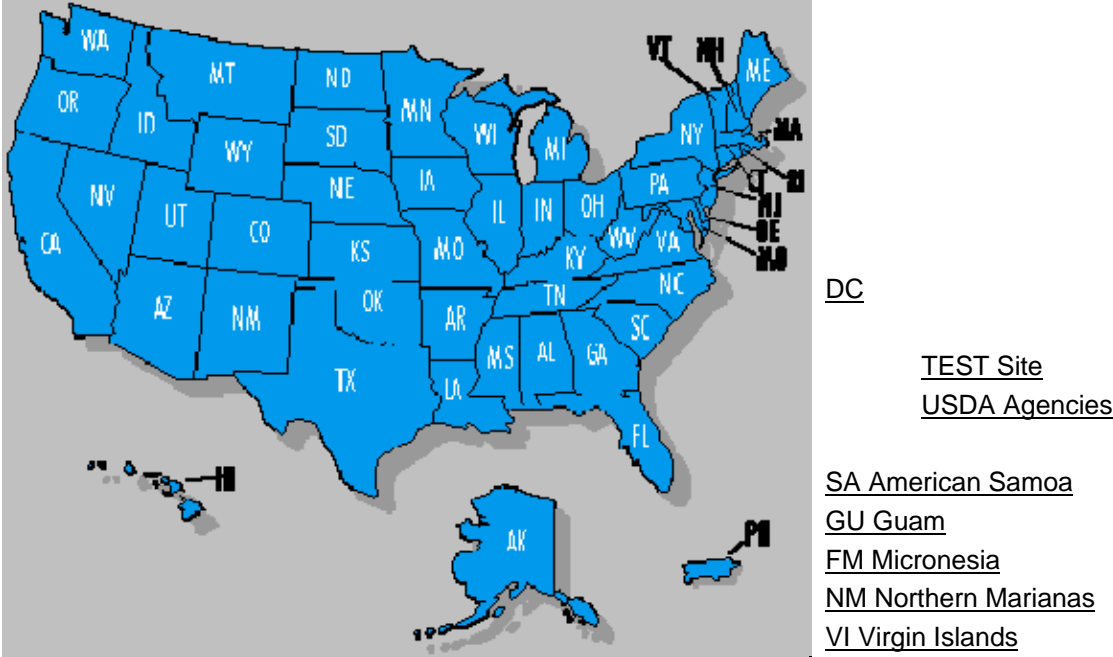
Latest data update from CRIS:
July 11, 2007

This site is developed and hosted by the
CALIS Information Technology Office, University of Vermont.
Comments or questions: pdowner@uvm.edu or slang@uvm.edu
Last modified: March 14, 2006

CRIS Forms Assistance | USDA | CRIS | CSREES | NIMSS

1. Select AD-416-AD-417, under Enter Forms

Select your state, territory or USDA agency/function for AD-416/417/2008 forms:



2. Select your state, territory, or USDA agency from the displayed map.

**Help for
this
screen**

Washington sites for AD-416/417/CSREES-2008 forms

Select the participating site where your Information is to be collected:

Contact

- | | | |
|--------------------------|--|---|
| <input type="checkbox"/> | WN.N - Washington State University Extension | Esther Tate (etate@wsu.edu) |
| <input type="checkbox"/> | WN.P - Ag Research Center, Washington State University | Ellen Yeates (eyeates@wsu.edu) |
| <input type="checkbox"/> | WN.V - Animal Health Research Ctr, Washington State Univ | Michelle Martinez (mmartinz@vetmed.wsu.edu.) |
| <input type="checkbox"/> | WN.Z - Univ of Washington College of Forest Resources | Bob Edmonds (bobe@u.washington.edu) |

if you are not affiliated with or instructed to use one of the sites listed above, use the following option (same password as AD-421/419 reporting):

- NSCG - Non-State Cooperator Grant in Washington [Sue Lang \(slang@uvm.edu\)](mailto:slang@uvm.edu)
[Instructions and more about who should use this](#)

For SERD grants (CSREES Higher Education Program, International Program, Multicultural Alliance), use the following option:

- SERD - Science and Education Resource Development [Carolyn Deckers \(cdeckers@cris.csrees.usda.gov\)](mailto:cdeckers@cris.csrees.usda.gov)
[More about who should use this](#)

Enter the password: golden

Proceed

3. Select: **Ag Research Center, Washington State University**
Enter " **golden** " as the password and then click the **[Proceed]** button.

Initiate or Edit projects on the WN.P AD-416 Work List

[Help for
this
screen](#)

Enter the Principal Investigators's last name (use only the last name unless one or more initials are needed to distinguish multiple principal investigators with the same last name.

Enter Investigator last name: (initials if needed)

About this function

A tutorial mode is available which gives you an expandable frame in which you can view instructions as you work on completing the forms. Tutorial mode must be initiated on the [home page](#).

If you are not using tutorial mode, help links will be displayed in a second browser session, in a minimized, maximized or resizable window, depending on your particular browser.

4. Enter your last name and [Proceed] to the work list of projects for you as the principal investigator.

WN.P Project / Form Selection

Forms Currently in Progress

==> There are no AD-416s in progress for Researcher (last name will appear here)

If you think there should be, go back and try entering the name again or contact Ellen Yeates eyeates@wsu.edu for assistance.

If you have received instructions to complete the AD-416/417, determine whether the form is for a new project or to revise an existing one. (If you are not sure, before making this selection, check with Ellen Yeates eyeates@wsu.edu)

New project	Revision
<p>To initiate a new project form, select the funding type and click the <i>New</i> button below:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Hatch project <li><input type="checkbox"/> Hatch Multistate participation <li><input type="checkbox"/> McIntire-Stennis project <li><input type="checkbox"/> Animal Health project <li><input type="checkbox"/> State project (any project not funded by CSREES) <hr/> <ul style="list-style-type: none"> <li><input type="checkbox"/> NRI Competitive Grant <li><input type="checkbox"/> Special Grant <li><input type="checkbox"/> Cooperative Agreement <li><input type="checkbox"/> Other CSREES Grant <div style="text-align: right; margin-top: 20px;"> <input type="button" value="New"/> <i>(Initiate a new project form)</i> </div>	<p><i>(only projects with funding types listed in the left top section can be revised using this process)</i></p> <div style="margin-bottom: 20px;"> <input type="button" value="Revision"/> <i>(Lists projects available for revision)</i> </div> <hr/> <div style="background-color: #cccccc; height: 200px; width: 100%;"></div>

5. If you have AD-416 forms in progress, you can select a project from the work list, choose "**AD-416 Research Resume**" and **[Proceed]**
 - **OR** -- If you are initiating an AD-416 form:
 - a. For a **New project** select the appropriate funding type in the yellow box and click **[New]** to initiate the form.
 - b. For a **Revision** click the **[Revision]** button to display the list of projects that may be revised. Select a project from the list and click **[Proceed]**.
 - c. **NOTE:** the funding source determines which type of AD-416 you initiate. Also, if you are not sure whether a project should be revised or new contact Ellen Yeates for specific instructions.

INSTRUCTIONS FOR COMPLETING THE AD-416

Following is a sample completed page of the AD-416 Work Unit Description form. Look it over then read the instructions on how to complete each numbered Field on the form.

This is NOT a final copy for administrative files!
Please notify Ellen Yeates (eyeates@wsu.edu) when you have completed all your information for this project.

U.S. Department of Agriculture AD-416 Research Work Unit/Project Description -- Research Resume U.S. Dept. of Agriculture, State Agricultural Experiment Stations and Other Institutions			Date (Month/Day/Year) 09/05/2007
1. Accession	Agency Identifiers 2. CSREES 3. WNP	5. Work Unit/Project No. WNPOYEATES	6. Status A = New Project
7. Title Enter the Title of the Project			
8. Performing Organization 5264 - 3800 Ag Research Center Agricultural Experiment Station, Washington State University		9. Cooperating Departments within State Performing Institution a. b.	
10. Multistate Project No.		11. Cooperating States	
12. Investigator Name(s) Last Name and Initials 1. Yeates, E.G.			
13. Project Contact Last Name and Initials: YEATES, E.G.		Phone: 509-335-4563 Fax: 509-335-6751	
E-Mail: eyeates@wsu.edu URL:			
14. Project Type Hatch		15. Contract/Grant/Agreement No.	Proposal No.
16. Amount		17. FY	
18. Award Date (Month/Day/Year)	19. Start Date (Month/Day/Year)	20. Termination Date (Month/Day/Year)	Duration
	09/01/2009	08/31/2014	60 months
21. Objectives Objectives are limited to 3200 characters; use complete sentences. Enter a clear, concise statement of the objectives of the research, which should be specific and attainable within the duration of the project using the resources available.			
22. Approach Approach is limited to 3200 characters; use complete sentences. Describe the ways in which the research is to be conducted, with emphasis on the scientific methods and any unique aspects or significant departures from usual approaches.			
23. Non-Technical Summary Non-Technical summary Include both the situation addressed and the purpose of this project. Be concise (2 or 3 sentences) max 1600 characters. The 2 sections will be combined into one paragraph when displayed.			
24. Keywords equipment, processes, approach, technique or system; and specific properties, reaction, or function (select at least 6). Not to exceed 345 characters.			
Signature		Title	Date
Dept: Admin: Chair's signature			

Enter the following information:

Note: **Fields 1-4** are hidden and completed automatically using your choices at login.

FIELD INSTRUCTIONS

5 Work Unit / Project No.:
If a new project, enter the WSU designation code (WNP) with a departmental tracking number using a zero and the PI's last name, (such as WNP0YEATES); this designation will be changed to a "WNP0####" number after the project has been approved by ARC and at final submission time to USDA.

If this is a revision of an existing project, enter the "WNP0####" number for this project. Example: WNP01134.

6 Status:
The status displayed will be submitted on this form and cannot be changed. A=New, C=Revised

14 * Project Type:
*** Skip to this section next** and select the type of project so the appropriate directions for Fields 7 (& 10 if applicable) will display.

Select only one CSREES funding program, or "S = State" which can be used for any other funding sources.

If it is a grant, select the type of grant and enter the proposal number in the field after #14 – The proposal number is assigned by the granting agency. Enter the assigned proposal number found in the award letter, the Agreement Face Sheet or proposal acknowledgement letter.

For SERD grants, refer to instructions provided by the SERD office. The information is entered online in another location with a different password.

7 & 10 Title:
If this is a Multi-State project, select the applicable Multi-State project number from the drop-down list. The Title will be automatically entered for you and cannot be changed.

The Multistate Project number identifies projects supported by Multistate Research funds, or those formally on record as contributing to a Multistate Research project. This number combines the region (NE, NC,

S, W, or NRSP) and the project number in the format: **region-###** (for example, W-2133).

If it is a Hatch, State, McIntire-Stennis, or Animal Health, enter the title of the project yourself. Keep the title under 175 characters including spaces (80 preferred). Do not use phrases such as "research on", "investigation of", etc. Do not use quotation marks or underscoring. The title is used in information retrieval searches.

8 Performing Dept.:

Select the lead investigator's department/center, from the pull down menu.

9a & 9b First and Second Cooperating Dept.:

As applicable, select up to 2 departments from the pull-down menu who are participating significantly in the project. Generally, select the departments of the first two co-PIs on the project.

10 Multi-State Project No.:

This field will only be shown if the Project Type in Field 14 has been selected as "L-Hatch/Multistate" and will be pre-filled with the Multi-State project number chosen for Field 7.

11 Cooperating States

List Cooperating State(s) - **if this is NOT a multistate research project.**

Identify any OTHER STATES that are participating in the same research project. Include only states that are significantly contributing to the research effort on this project as indicated by the participants listed and their locations.

12 Investigator Name(s) Last Name and Initials)

A total of 12 can be listed. List the Principal Investigator (or project leader -- the person who is responsible for doing this report) on Line 1. Lines 2 through 12 are used for co-investigators. Use upper/lowercase as customary for proper names. List names of investigator(s)---last name first, then initials.

13 Project Contact

Complete this information for the either the Lead PI or another person or office that would best answer questions about research issues which may potentially be controversial.

If applicable, include a URL that is complete and *project-specific*.
example: <http://cwf.uvm.edu/cris/>

- 14 Project Type:**
Should have already selected the correct project type from pull-down menu. Hatch, Hatch/Multi-state, McIntire-Stennis, Animal Health, State, or one of the appropriate Grant designations. Select only one CSREES funding program, or "S = State" which can be used for any other funding sources.
- Proposal Number:**
This should have been chosen after filling in field 6. See instructions there.
- Grant Information (Fields 15-18)**
These fields are usually completed by USDA/CSREES at the time the money is awarded.
- 15 Contract/Grant/Agreement No.**
This field may not be accessible if a proposal number has been added in with Field 14. If it is available, enter the contract number if known. Otherwise, automatically, "NOT YET AWARDED" will appear on the form for you.
- 16 Amount**
The amount is determined by the granting agency and this field may not be shown. Enter the amount designated by the agency. If not known, leave blank. Later on, it will be filled in by USDA/CSREES when approved and money is awarded. It will appear on your Award Face Sheet.
- 17 FY**
Enter Fiscal Year for this grant, if known, otherwise, leave blank – it will be assigned at USDA/CSREES when approved.
- 18 Award Date (Month/Day/Year)**
The award date is determined by the granting agency. It will be assigned at USDA/CSREES when approved and they determine when the money will become available.
- 19 Start Date:**
For new projects, start date should be 2 months from the current date and beginning the first day of that month to give time for CSREES to approval.

For revisions, the start date should be the next day after the termination date of the present project. Enter in the format: mm/dd/yyyy.

20

Termination Date:

Enter the estimated termination date for the project. The Termination date is usually five years from the start date. Enter in the format: mm/dd/yyyy.

If the project is associated with a Multistate Research project, the termination date will be entered automatically and cannot be changed.

For a grant, the termination date is the same as the grant's termination date.

McIntire-Stennis projects should only be for three years to start.

At the bottom of the page is the “**CHECK and SAVE**” button. Click on this and it will look for entry errors and post the things to be checked and corrected in the orange box. It will show you a copy of your AD-416 so far. You can click on the back arrow key at the top to go back and do any corrections. It will also tell you what more you need to work on before submission. Look over the form, and when all errors are corrected, once again click on “**Check and Save**” then continue. Click on the “**GO to SCREEN 2**” button.

SCREEN 2

21

Goals/Objectives/Expected Outputs

Provide a clear, concise statement of the goals and objectives of the proje that conveys an accurate picture of the project's purpose. The goals and objectives should be specific and attainable within the duration of the project and with the available resources. If the application lists milestones/target dates for important activities or phases of the project, include this information. Include a description of the expected outputs from the project.

For multistate projects, enter the objective(s) exactly as defined in the multistate project outline (expected outputs may be summarized or truncated so as not to exceed the character limits for this section).

The approach should describe the ways in which the research is to be conducted, with emphasis on the scientific methods and any unique aspects or significant departures from usual approaches. A maximum of 3,200 characters, including spaces, are allowed.

* We recommend that you paste in the text from your wordprocessor (spell-check there), but **do not** include formatting such: degree symbols, math symbols, Greek letters, italics, boldface, super- or subscripts, or underlines (substitute suitable words or alternate characters).

22

Methods

Describe the ways in which the project will be conducted with emphasis on the general scientific methods and any unique aspects or significant departures from usual methods. Include a description of how the results will be analyzed, evaluated, or interpreted. Describe the efforts that will be used to cause a change in knowledge, actions, or conditions of a target audience. Include a description of how the output(s) will be evaluated and/or quantified for its impact on the intended audience(s). A maximum of 3,200 characters, including spaces, are allowed.

* Do not use any of the formatting per the instructions for the Goals section above.

23

Non-Technical Summary

Enter a non-technical summary of this project, including both the situation this research addresses and the purpose of this project. Also include general statements describing the methods to be used, the expected outcomes/impacts, and the anticipated benefits. Provide information at a level that most citizens can understand. This nontechnical summary is designed to enhance the usefulness of the information in the database, especially to legislative and other public audiences. A maximum of 3,200 characters, including spaces, are allowed.

* Once again, do not use any of the formatting per the instructions for the Goals section above.

24

Keywords

It is important to assign appropriate **keywords** for automated information retrieval of project information through the CRIS system. Limit keywords to one- or two-word terms. Collectively, the keywords for a project should resemble an abbreviated abstract of the project. One keyword / phrase per line. Do not use hyphens to link phrases. Limit to 20 lines.

At the bottom of the page is another “**CHECK and SAVE**” button. Click on this and it will look for entry errors and post the things to be checked and corrected in the orange box. It will show you a copy of your AD-416 so far. You can click on the back arrow key at the top to go back and do any corrections to Page 2. Look over the form, and when all errors are corrected, click on the “**CONFIRM INFORMATION**” button.

Confirmation Screen

You should see a **Confirmation Screen** if your information was successfully saved in the work file. Use the “**Print**” button for two copies of this page. One copy to keep for your records and another to be signed. Signatures of chairs and/or center directors from all affected departments/centers must be on the hard copy before it is submitted to the ARC.

This screen also gives you an “**Outline**” button to be able to upload a .pdf version of your full outline. Do not do this. Submit both a hard copy and an electronic version of your outline with copies of your signed AD-416, AD-417, and Assurance Statement. ARC will review, make edits if needed, and upload the outline for you at the time of submission.

Use the “Return**” button provided (and NOT your browser's Back button) to return to an updated Form Selection list.**

Back at the Form Selection Page:

From this page, you can now select the “**AD-417**” button for the Form to open and fill in. There may be check marks over all the forms because some information has been entered but as long as the heading says Forms Currently in Process, they can be selected for editing. Click on **AD-417** to load up the form.

Preparation of Classification of Research (AD-417):

The AD-417 form is the tool by which agricultural research is classified. These classifications, subject of investigation, field of science, etc., provide valuable information as to the amount of effort directed to various types of activities. This information is extremely helpful to administrators allocating resources and to the scientist who needs to know what research is being done on a specific program. Funding reports to Congress are based on the classifications entered for each project. In addition, state and federal legislators and others interested in monitoring agricultural research access this information on the web.

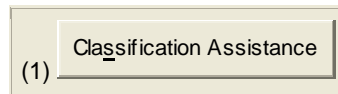
The principal investigator is not expected to complete the AD-417 form without assistance. However, because the researcher is most familiar with the project's objectives and procedures, he/she should complete the form in conjunction with the chair/center director and/or the ARC staff. The chair/center director must assume responsibility that the form has been accurately completed before it is submitted to the ARC.

The *Manual of Classification of Agricultural and Forestry Research, Revision VI* should be available in each department/center. It is available on the web at: <http://cwf.uvm.edu/cris/revman/manvi.htm>

Following is a sample completed page of the AD-417 Project Classification form. Look it over then read the instructions on how to complete each numbered Field.

Enter AD-417 Project Classification

- To select the research classification codes, use either the (1) **Classification Assistance** button or (2) fill in the form below manually.
- If you use the Classification Assistance button, do not complete fields 25-29 until you return to this screen.
- Click the **Check data** button at the bottom when finished.
-



Project: WNP0YEATES H - Hatch
Test Project

[OMB Approved 0524-0042](#)

Research Effort Categories

25. [Basic](#) % 26. [Applied](#) % 27. [Developmental](#) % % <==== this line must total 100

28. [Forestry](#) Component % 29. [Animal Health](#) Component %

2) Classification by Knowledge Area, Subject of Investigation, and Field of Science.

<u>Knowledge Area</u>	<u>Subject of Investigation</u>	<u>Field of Science</u>	<u>%</u>
30. Administration of 902 Projects and Programs	711C Research on research management (not research management per se)	303C Information and communication	100 %
31. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> %
32. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> %
33. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> %
34. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> %
35. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> %
36. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> %
37. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> %
38. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> %
39. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> %

must total 100 %

Here are some suggestions to assist in the completion of the AD-417:
In any percent field enter whole numbers only—no fractions or decimals.

- The principal investigator, in consultation with the chair/center director, completes Fields 25, 26, and 27. Percentages entered in the three fields must total 100. One project rarely contributes to all three fields.

Field	Instructions
25	Basic Research—Research that has a primary goal of gaining fuller knowledge or understanding of a subject.
26	Applied Research—Research that has a primary goal of the practical application of knowledge to meet a recognized need.
27	Development Effort—Research findings to produce useful materials, devices, systems, or methods.

The total percentages for lines 25, 26, and 27 must total 100%

28-29 If the project is funded by McIntire-Stennis or Animal Health programs, the Forestry or Animal Health component will automatically be assigned 100% in fields 28 and 29, respectively. You can optionally assign percentages to these categories up to 100% each for projects funded by other sources.

30-39 Use the “Classification Assistance” button at the top of this page to determine the categories for your project

Primary Classification. This classification consists of three series of broad classifications.

- Knowledge Area (KA)
- Subject of Investigation (SOI)
- Field of Science (FOS)

The total of the percent effort column must equal 100%.

Click **Check Data** button at the bottom. Resolve errors before packet goes to ARC. Click on

Check data

(data validity check)

The information you entered will be checked for errors. This does **not** save or submit anything, but only checks to be sure the information you entered is acceptable.

Click on the **Save Information** to go to the Confirmation Screen. If all is correct, print out a copy for your records and click the **Return** button to go to the Project / Form Selection page.

Select the **CSREES-2008** form to complete next.

Preparation of CSREES-2008 Quality Assurance Statement:

Following is a sample completed page of the CSREES-2008 Assurance Statements form. Look it over then read the instructions on how to complete each numbered field.

Enter information for CSREES-2008 Assurance Statements

- Press the "Check data" button at the bottom when finished.

[OMB Approved 0524-0039](#)

STATEMENT OF POLICY ... read this if you are unfamiliar with the purpose of this form	
1. Institution WN.P - Ag Research Center, Washington State University	2. Project number WNP0YEATES
4. Title of project: Test Project	3. Project director Yeates, E. G.

Check appropriate statements, supplying additional information when necessary.

A. BIOSAFETY OF RECOMBINANT DNA

- Project does not involve recombinant DNA.
- Project involves recombinant DNA and was either
- approved
 - determined to be exempt from NIH Guidelines by an Institutional Biosafety Committee on: (Date as mm/dd/yyyy)

This performing organization agrees to assume primary responsibility for complying with both the intent and procedures of the National Institutes of Health's (NIH), DHHS [Guidelines for Research Involving Recombinant DNA Molecules](#) as revised.

B. CARE AND USE OF ANIMALS

- Project does not involve use of vertebrate animals.
- Project involves vertebrate animals and was approved by the Institutional Animal Care and Use Committee (IACUC) on (Date as mm/dd/yyyy)

This performing organization agrees to assume primary responsibility for complying with the Animal Welfare Act (7USC, 2131-2156), Public Law 89-544, 1996, as amended, and the regulations promulgated thereunder by the Secretary of Agriculture in 9 CFR Parts 1,2,3, and 4. In the case of domesticated farm animals housed under farm conditions, the institutions shall adhere to the principles stated in the [Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching](#), Federation of Animal Science Societies, 1999.

C. PROTECTION OF HUMAN SUBJECTS

- Project does not involve use of human subjects.
- Project involves use of human subjects and
- Was approved by the Institutional Review Board (IRB) on (Date as mm/dd/yyyy)
Performing Institution holds a [Federalwide assurance number](#)
(Single Project Assurance is no longer valid)
 - is exempt based on [exemption number](#):
 - Specific plans involving human subjects depend upon completion of survey instruments, prior animal studies, or development of material or procedures. No human subjects will be involved in research until approved by the IRB and a revised form CSREES-2008 is submitted.

This performing organization agrees to assume primary responsibility for complying with the Federal Policy for Protection of Human Subjects as set forth in 45 CFR Part 46, 1991, as amended, and USDA regulations set forth in 7 CFR 1c, 1992. All nonexempt research involving human subjects must be approved and under continuing review by an IRB.

Answer each section as appropriate to report recombinant DNA research, use and care of animals, and protection of human subjects in this research project. Click on the links within the forms for more detailed information about what qualifies and should be reported.

If approval of a University committee is required, include a copy of the approval memo with the packet to be sent to the ARC. The applicable committees with their contact information is as follows:

- A. Biosafety of Recombinant DNA:
Contact WSU's IBC (Institutional Biosafety Committee) at: <http://www.biosafety.wsu.edu/>
- B. Care and Use of Animals:
Contact WSU's IACUC (Institutional Animal Care and Use Committee) at: <http://www.iacuc.wsu.edu/>
- C. Protection of Human Subjects:
Contact WSU's IRB (Institutional Review Board) at: <http://www.irb.wsu.edu/>

Fill in the blanks with the date of the Committee's approval memo and include additional information such as the exemption number if applicable and the Federalwide Assurance Number for use of Human subjects. Contact the committee if it is not listed on their memo.

Signatures of chairs and/or center directors from all affected departments/centers must be on the hard copy before it is submitted to the ARC.

Submitting to the Agricultural Research Center (ARC)

The project is ready for submission to the ARC when the final draft of the project outline has been completed, the Peer Review Summary is completed and signed by the project leader's chair/center director, and the AD416, AD417, and CSREES-2008 input to WebForms and a hard copy printed. The **AD416 and CSREES-2008** must be signed by the **project leader's chair** (and center director, if appropriate) as well as the chair(s) and center director(s) of all the other WSU cooperators.

Use the checklist on page 40 of this booklet to verify that all material is accurately completed. If appropriate, submit the packet of material to the ARC via on-campus chair(s) for final signatures.

REQUESTING AN EXTENSION

A one-year "free" extension (an extension that only needs the approval of the ARC) may be requested by a PI and will usually be approved by the ARC to allow additional progress toward objectives. Such extensions are not subject to review by CRIS and no approval documentation is sent to the ARC by CRIS. This type of extension, referred to as a Program of Research extension at USDA, may be requested **once** during the "life" of the current revision of the project. For Hatch projects, this can allow for a sixth year. For McIntire-Stennis, this will allow for a fourth year.

An additional extension past the first "free" extension requires a justification and will be reviewed at CRIS. Approval documentation will be sent to us by CRIS. This type of extension may also be used **once for each revision of the project outline**. To receive an additional one-year "justified" extension, the request must meet the following requirements:

- Memo from the PI justifying the request.
- Review of annual progress reports indicates satisfactory progress each year.

- Based on a review of the past two progress reports, it appears a one-year extension will result in **substantial completion** of the current objectives of the project.
- The PI and his/her chair/center director agree that the PI will submit a new or revised research proposal on a timely basis prior to the expiration date of the current project unless the project will be terminated, at which time a termination report will be prepared.
- The request is approved by his/her chair/center director. The memo is sent to ARC for the Director's approval and input into the CRIS system.

See sample request formats on pages 43-44.

PREPARATION OF THE ANNUAL PROGRESS REPORT OR TERMINATION REPORT (AD-421)

An **annual progress report** for each ARC project is submitted to SERD-CSREES via WebForms between January 1 and April 1 each year. These reports are incorporated into the CRIS database and are available to the public worldwide via the internet at <http://cris.csrees.usda.gov/menu.html>.

Form **AD-421 is also used for termination reports**. If a project is terminating, be sure to check that status in field 40. The dates of the "Period Covered" are from the first day of the project to the actual termination date.

The project leader should gather input from all cooperators and submit one report.

Report **MUST** be written in lay terms, that is, in non-scientific language.

Measurement Data are to be in metric terms only.

Review and signature. All reports are to be reviewed and signed by the department chair or center director. The Associate Director reads each report before the ARC sends it to Washington, DC.

Please keep in mind the importance of preparing well-written reports. In addition to being used extensively by Federal and State research scientists and administrators, all CRIS data are available to the general public.

Following are samples of completed pages of the AD-421 Accomplishments Report form. Look them over then read the instructions on how to complete each numbered Field.

U.S. Department of Agriculture Accomplishments Report AD-421 U.S. Dept. of Agriculture, State Agricultural Experiment Stations and Other Institutions			Date (Month, Day, Year) 03/18/2009
1. Accession 0193160	Agency Identification No. 2. CSREES 3. WN.P	5. Work Unit/Project No WNP00432	6. Status Annual Report
7. Title Pre- and Post-Harvest Manipulation of Palatability, Appearance and Lipid Composition of Red Meat			
12. Investigator Name(s) (Last Name and Initials) Busboom, J. R.; Nelson, M. L.			
20. Termination Date 07/31/2010		40. Period Covered (mo/da/year): 01/01/2008 TO 12/31/2008	
<p>Outputs:</p> <p>We evaluated the fatty acid composition of adipose depots of raw and cooked longissimus muscle steaks. CLA level was almost doubled in outer s.c. fat compared to lean muscle in this study, but PUFA with chain lengths longer than 18 were detected almost exclusively in lean muscle. Thus, fatty acid composition of beef steaks differed among fat depots, especially membrane lipid vs subcutaneous or seam fat. However, cooking had only minor effects on fatty acid composition. In a second study, diet (forage or concentrate-based) or aging (wet or dry) had no effect on palatability of steaks; however, aging affected palatability of ground beef. Dry-aging had more negative effects than wet-aging, but aging had no positive effects on ground beef palatability. Relationships among intramuscular fat and omega-3 and omega-6 fatty acids and beef palatability were developed. <i>Taenia hydatigena</i>, a canine tapeworm, was used as a surrogate organism to study the minimum amount of heat required to inactivate <i>Taenia</i> spp. eggs. The parasite eggs were heat treated in a 4x4 factorial arrangement of time-temperature combinations (5, 10, 15, 20 min. at 40, 50, 60, 70 degrees C) in a heating block and further processed for exshelling (with 1% NaClO) and activation (with 50% sheep bile) to release activated oncospheres. Viabilities were measured by counting the percent activated oncospheres and internal staining with 1% trypan blue. No activity was found for any treatment beyond 50 degrees C for 5 minutes. Measures of percent activity indicated complete inactivation of oncospheres at temperature below the gelatinization temperature of potato starch, but trypan blue staining was not a good measure of <i>Taenia</i> egg viability.</p>			
<p>Outcomes/Impacts:</p> <p>While easier to sample subcutaneous or seam fat for fatty acid analysis, sampling muscle tissue should be more characteristic of human diet. The large differences in fatty acid composition between fat depots should contribute to better sampling techniques and to better interpretation of fatty acid data. Niche marketers often age beef on the carcass (dry aging). Application of our finding that there was no difference between wet and dry aging and that cuts destined for ground beef should not be aged could save millions of dollars in losses due to shrinkage, spoilage, and off flavors. Beef palatability was negatively affected by omega-3 fatty acids and polyunsaturated fatty acids, which may allow screening of beef for palatability by measuring fatty acid composition. This could be an economically viable approach to improve the image and value of beef. The WA beef industry sustains over \$1 million in direct losses each year due to carcasses condemned for beef measles. Our current results indicate we may have found a means to virtually eliminate this problem in Pacific Northwest cattle. A high priority, therefore, is to confirm the effectiveness of our control measures.</p>			
<p>Publications:</p> <p>Nelson, M.L., J.R. Busboom, C. Ross, and J. O'Fallon. 2008. Effects of supplemental fat on growth performance and quality of beef from steers fed corn finishing diets. <i>Journal of Animal Science</i>. 86:936-948.</p> <p>Chapalamadugu, K.C., J.R. Busboom, M.L. Nelson, D.D. Hancock, J. Tang, and D.P. Jasmer. 2008. <i>Taenia taeniaeformis</i>: Effectiveness of staining oncospheres is related to both temperature of treatment and molecular weight of dyes utilized. <i>Veterinary Parasitology</i>. 151:203-211.</p> <p>Ringkob, T.P., D. Joos, J.R. Busboom, T. Jiang, M.L. Nelson, J.O'Fallon, and C.T. Gaskins. 2008. Influence of percent intramuscular fat on individual fatty acids in the longissimus muscle from Wagyu crossbred beef. <i>International Congress of Meat Science and Technology</i>. ICOMST. August 10-15. Cape Town South Africa. 54.</p>			
<p>Participants:</p> <p>Birpal Buttar, Ting Jiang, Mohammed Islam, Doug Jasmer, Doug Walsh, Kalyan Chapalmadugu, Thomas Ringkob, Kevin Piper, and Jim O'Fallon.</p>			
<p>Target Audiences:</p> <p>Cow/calf producers and beef feedlot operators.</p>			
<p>Project Modifications:</p> <p>Nothing significant to report during this reporting period.</p>			
Approved (Signature)		Title	Date

U.S. Department of Agriculture Accomplishments Report AD-421 U.S. Dept. of Agriculture, State Agricultural Experiment Stations and Other Institutions			Date (Month, Day, Year) 06/09/2009		
1. Accession 0202247		Agency Identification No. 2. CSREES 3. WN.P		5. Work Unit/Project No. WNP08167	6. Status Final Report
7. Title Emission Measurements of Ammonia, Methane, Nitrous Oxide and Particulates from Beef Production					
12. Investigator Name(s) (Last Name and Initials) Johnson, K. A.; Westberg, H. H.; Lamb, B. K.; Kincaid, R. L.; Harrison, J. H.; Mount, G. H.					
20. Termination Date 12/14/2008			40. Period Covered (mo/da/year): 12/15/2004 TO 12/14/2008		
Outputs: Publications to be submitted to refereed journals are presently in preparation. These publications will be submitted to appropriate animal sciences and environmental journals to maximize their visibility and impact. The information gained from the conduct of this project has been disseminated through presentations at the National Cattleman's Beef Association in summer of 2008 and spring of 2009 and in discussions/presentations with the Washington Cattle Feeders Association and Washington Cattleman's Association. Additional presentations to these and other groups are planned. The presentations have stressed the relevance of air quality measurements to feedlot operations, the data obtained from the research conducted in this project, and the need for on-site work in the air quality area to assist livestock producers in reducing their ecological footprint. Other agricultural air quality researchers are aware of the data collected, have used some of the results to assist in guiding their own research and will have access to the data as soon as it is published. The database generated from this work will be used and available for developing and validating emissions models.					
Outcomes/Impacts: The goal of this project was to obtain gaseous and particulate emissions data from cattle feedlots to provide credible scientific information that is lacking to animal agricultural stakeholders and for making air quality policy decisions. Measurements were made at two sites, one a small lot containing 10,000 hd at capacity and another a medium sized lot containing 30,000 hd at capacity. At the small lot, when ambient temperatures were below freezing and wind speeds light, ammonia and N2O concentrations due to emissions from the feedlot were indistinguishable from regional ambient background. Methane concentrations due to the feedlot did exceed global background levels within and immediately downwind of the feedlot. In the spring at the larger lot, ammonia and methane concentrations were significantly above ambient background levels. N2O concentrations were variable and, at times, indistinguishable from ambient concentrations. Ammonia fluxes during warm spring conditions averaged 142 ug/m2/s which reflects emissions from approximately 100 m and 225 hd of 400 kg growing and finishing steers. These data are lower than those observed in Texas feedyards and in the range of those observed by Kansas and Canadian researchers. This information will help producers who are required to submit annual emissions data to local and state emergency response commissions. Additionally, the information derived from this project will assist regulatory agencies to derive relevant and scientifically valid reporting tools that create meaningful inventories.					
Publications: No Publications Reported					
Participants: Kristen A. Johnson (PD) was responsible for all aspects of the project. Hal Westberg (PD) responsible for the atmospheric chemistry portions of the project until his retirement. Brian Lamb (PI/PD) was responsible for atmospheric chemistry measurements after Westberg's retirement. Ronald Kincaid (PI) was responsible for the analysis of diet and soil samples. Joseph Harrison (PI) was responsible for outreach to WA stakeholders. George Mount (PI) was responsible for use of the DOAS to measure ammonia from the CAFOs. Brian Rumburg (Post doctoral researcher) was responsible for data collection, reduction and analysis of the data. Shelley Pressley (Research Assistant Professor) was added to the project in the final year and was responsible for the development of the REA system and running the DOAS instrument. Students: several undergraduate students worked on the project as a part of undergraduate research experiences. Several graduate students were also a part of the research and a masters thesis will result from a portion of the work.					
Target Audiences: The target audience for this information is producers who manage ruminant CAFO's and policy makers. Several presentations have been given to the National Cattleman's Beef Association, the Washington Cattle Feeders and the Washington Cattleman's Association, discussing the data and the need for this information. A producer session entitled "Nutrient Management Workshop for Beef Feedlots" was held in 2005 in the TriCities, WA and Caldwell ID and some of the information from this project was disseminated. Several undergraduates participated in the research and had undergraduate research experiences. This experience ranged from animal sciences to air quality instrumentation.					
Project Modifications: There were no major changes in approach.					
Approved Signature			Title		Date

Here are some suggestions to assist you in preparing the AD-421 report.

The project leader should gather input from all cooperators and submit **one** report.

Field Instructions

Outputs (Limit to 3200 Characters and Spaces)

For Annual Report

Report outputs completed during the reporting period that contribute to the goals and objectives of the project (*do not include publications here, they are to be reported separately in the block below*). Do not include findings or conclusions that have been reached; these are to be reported separately as changes in knowledge in the outcomes section. Include a description of how the results have been disseminated to communities of interest or how the product is being shared. Include patent applications, etc. Use the links for more details.

Concisely summarize significant results, accomplishments, conclusions, and recommendations, **as well as why they are meaningful**. Do not describe procedures. **Write the report in lay terms**. If conclusions and recommendations are not available, report the present stage of achievements.

Statements must be adequate to appear **without change** in published sources. Remember that this report reflects on the investigator's status as a scientist each time it is included in a CRIS search. Do not exceed the 3,200 character limit, including punctuation and spaces.

If this is a McIntire-Stennis project, include the graduate student years (GSY), i.e., GSY=2, as the last sentence.

Disclose patents received and applications made, including serial number and filing data, at the end of the progress section.

For a Termination Report:

Give a brief summary of the most significant outputs and dissemination activities for the entire life of the project. Describe how findings, results, techniques, or other products that were developed or extended from the project generated or contributed to an outcome/impact. Describe the results of the project evaluation. Indicate how resources and activities helped to produce project outputs and achieve project outcomes and impacts. Use the links for more details.

Outcomes / Impacts (Limit to 3200 Characters and Spaces)

For Annual Report

Describe how findings, results, techniques, or other products that were developed or extended from the project generated or contributed to an outcome/impact. Describe the results of the project evaluation. Indicate how resources and activities helped to produce project outputs and achieve project outcomes and impacts. Use non-technical language to summarize impacts.

Publications (Citations are not limited)

For Annual Report

List publications that are specific to the project during this reporting period. Include only those that have been **published**. Include only those publications not previously reported. Include printed and electronic publications, journal articles, published abstracts, books, book chapters, and theses (see examples of publications using the links). No talks, No presentations, No newsletter or magazine articles). **Do not** enter authors in all capital letters and **do not** number the citations. Include the year of publication after the author(s) and before the title. Submitted and in-press publications are not allowed on a termination report.

Citations are not limited in length or number, but **MUST be separated by a blank line and must include the year of publication.**

If there are no publications to report for the period, leave this field blank.

For Termination Reports

Submitted and in-press publications are only allowed on a termination report.

When finished, click on the **Check and Save** button at the bottom. Look it over, and go back to correct any errors.

Click on **Go to Screen 2.**

Participants (Limit to 3200 Characters and Spaces)

Provide information about individuals who worked on the project. If applicable, provide information about partner organizations, collaborators, and contacts. Also describe opportunities for training or professional development that were provided by the project.

Target Audiences (Limit to 3200 Characters and Spaces)

Provide information on target audiences for efforts designed to cause a change in knowledge, actions, or conditions.

Project Modifications (Limit to 3200 Characters and Spaces)

Describe major changes in approach and reason(s) for these major changes. If applicable, provide special and/or additional reporting requirements specified in the award Terms and Conditions.

When finished, click on the **Check and Save** button at the bottom. Look it over, and go back to correct any errors. This will take you to the Confirm Report screen. Look it over, and go back to correct any errors. Click on the **Confirm Report** button. At the final Confirmation screen, scroll down to check for any missing information that will appear in red and go back to correct the applicable screen. When done, click on the Report Complete button. This will save and lock your information. If it needs to be edited in the future, contact Ellen Yeates in ARC (335-4563) to release the form once more.

USDA COMPETITIVE GRANTS

When researchers are notified that they have been awarded a **USDA Competitive Grant**, it is essential that the CRIS documents (AD-416, AD-417, Assurance Statement if requested) be completed using WebForms and submitted to the ARC. The funds will not be released until the CRIS paperwork has been completed. If the researcher does not forward the forms to the ARC for submission to USDA Awards Management, additional work must be done by the ARC staff, the department/center, and USDA/CRIS to correct the error and funds are delayed.

If you were awarded a Non-Competitive Grant, congratulations. Please call me and I'll give you instructions on how to enter the information.

If you are uncertain regarding these procedures or have questions, please call Ellen Yeates at the ARC at 509-335-4563.

MULTISTATE RESEARCH PROJECTS

The need to research certain types of problems on a multistate basis has been recognized by USDA administrators. To promote this type of research, a percentage of federal Hatch funds are earmarked to be spent on approved multistate research projects. These multistate research funds at WSU approximate 25% of the total federal allocation. To qualify for multistate research status, a multistate research project must be approved by the appropriate region's SAES directors' association and the Multistate Research Office of USDA/CSREES.

Western Multistate Research Projects are designated by W- followed by an identifying number, e.g., W-1147. Some ARC researchers are involved with multistate projects from other regions, e.g., Southern, S-; North Central, NC-; and North East, NE-. Projects of national scope are pursued through the National Research Projects (NRPs) or National Research Support Projects (NRSPs).

The strength of multistate research is that it brings together the resources and expertise from several states to investigate a particular problem and minimizes duplication of effort. Multistate research projects usually result from a region-wide problem being presented through an SAES director to the regional association. In most cases, the need for multistate research is brought to the director's attention by a researcher.

Briefly the steps to initiate a multistate research project are:

1. Identification of the problem by concerned researcher, SAES administrators, or SERD-CSREES personnel.
2. Approval by the regional directors' association for preparation of a multistate project proposal. An ad hoc technical committee composed of interested researchers is formed to prepare the proposal under the guidance of an appointed administrative advisor.
3. Approval of the proposed project and establishment of a permanent technical committee.

A researcher can participate in a multistate project by submitting an addendum (Appendix E) requesting assignment to a project. Contact the ARC for the procedure to follow in joining an established multistate project. See the example on Page 44.

After the researcher has been approved to join a multistate research project, the AD-416, AD-417, and CSREES-2008 must be completed to start an accompanying Hatch project. The title and objectives on the AD-416 must match **exactly** those that the researcher has identified in the multistate research project outline or the addendum. The project outline and the peer review forms used for other Hatch projects are not required because the multistate research project has already been through a review process.

In addition to formal Multistate Research Projects, other mechanisms exist for multistate research coordination. In the Western Region, the Western Director's Association establishes Western Education/Extension and Research Activities (WERAs or WCCs). Their purpose is to bring researchers together to coordinate related research without the need for a formal multistate research plan and to organize technical conferences, work groups, task forces, or symposia for exchange of experience and opinions. Multistate Research funds may be used to support the travel of participants to these meetings, but coordinating committees are not eligible to use Multistate Research funds for research. Accordingly, a researcher does not have to establish a Hatch project solely to participate in a WERA. **The researcher does need to have an appropriate Hatch project for research done in the area covered by the WERA.**

After a researcher has formally joined a multistate research project, salaries will be paid through the accompanying ARC project at the same percentage listed on the original Appendix E. If the appendix E includes technicians or postdoctoral employees, their salaries must also be paid through the ARC project at the percentage listed.

Please refer to the memos in the Examples section for more detailed information about using ARC funds to travel to the authorized annual meetings for Multi-State projects.

If you have any questions, contact Ellen Yeates at 335-4563 or eyeates@wsu.edu for more multistate information.

EXAMPLES

SAMPLE TIME LINE FOR SUBMITTING A NEW OR REVISED ARC PROJECT

TASK		DATES
Pre-planning	Discuss idea with chair/Center director	
CRIS Search	Complete CRIS Search	
Writing project outline	Submit project outline draft to department chair/Center director for review	
Receive approval for human or animal subjects or DNA/RNA use	Obtain, complete, and turn in forms to appropriate committee for approval	
Revising project outline	Revise project outline based on chair's/Center director's suggestions	April 1
Peer Review (4-6 weeks)	Submit project outline to department chair/Center director for Peer Review	April 15
Revising project outline	Revise outline based on reviewers' comments	May 31
Forms for CRIS (1 week)	Submit a rough draft of CRIS data to appropriate clerical staff for computer input on WebForms	June 15
Chair/center director signatures (Assume 2-3 working days for each signature needed)	Obtain signature on AD416, AD2008, and peer review forms from department chair(s)/center director(s)	Completed by June 25
Processing at the ARC (1 week)	Send hard copy of outline, signed CRIS forms and peer review summary to the ARC and send electronic version of outline to the ARC	June 25
Processing at USDA (6-8 weeks)	The ARC submits CRIS data and outline to CRIS	July 1
Final approval	Approved paperwork back from CRIS	August 25
Department Notification	The ARC notifies department/center of approval	August 26
Project start date	Project begins	September 1

FOR HATCH, MCINTIRE/STENNIS, ANIMAL HEALTH

Grid for Project Procedures / Forms Required for Projects

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Checklist for Project Procedures for:																
2	Hatch, Hatch/Multi-State, McIntire Stennis, Animal Health, State, and Grants																
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DEPARTMENT / CENTER CHECKLIST FOR USDA/CRIS PROJECTS

Researcher _____ Department / Center _____

Project Number _____ Current Termination Date _____

Date _____

_____ Outline (Hard Copy) - Refer to Procedures for ARC Projects

- _____ Title
- _____ Personnel
- _____ Justification
- _____ Previous Work and Present Outlook
- _____ Objectives
- _____ Procedures
- _____ Probable Duration
- _____ Financial Support Needed
- _____ Expected Impact
- _____ Bibliography and/or Literature Citations

_____ Electronic version of Outline in Word.doc format

_____ Peer Review Summary Sheet. (completed by Department Chair or Center Director

_____ Three reviewers not affiliated with the project

_____ AD-416

- _____ Investigators & Departments are the same as indicated on the project outline
- _____ Signed by Chairs and/or Directors of PI's Dept. and all cooperating departments

_____ AD-417

_____ Special Observations: does it have percentages claimed for Animal Health or Forestry

_____ Assurance Statement

_____ Signed by Chairs and/or Directors of PI's Dept. and all cooperating departments

_____ DNA/RNA approval needed? / current IBC approval memo attached

_____ Care and Use of Animals? / current IACUC approval memo attached

_____ Use of Human Subjects? / current IRB approval memo attached

Checklist Prepared by _____

Dept. _____

SAMPLE PEER REVIEW REQUEST LETTER

March 31, 2007

Dr. Sam Jones, Professor
Department of XYZ
ABC University
P O Box 123
Some Town ST 00000-0000

Dear Dr. Jones:

I would appreciate it very much if you would review the enclosed Hatch project proposal written by Dr. Ebenezer Scrooge and return your comments to me by May 1, 2007. In reviewing this proposal, please consider the following:

1. Does the outline clearly state the problem to be solved or specify the nature of the knowledge to be sought?
2. Are the objectives clearly stated and sufficiently specific that accomplishment within reasonable project duration can be expected?
3. Do the procedures suggest reasonable approaches to the accomplishment of each objective?
4. Does the outline give evidence of the leader's familiarity with essential literature, concepts, and methods relevant to the research?
5. Are the experimental materials, methods, samples, and criteria of measurements likely to provide interpretable results?
6. Are adequate provisions made for the scientific competencies essential to the conduct of the research?
7. Are definable benefits being sought; and, if so, are they attainable from the successful pursuit of this research? Have appropriate means been identified for disseminating the research findings?
8. Is the project likely to contribute significantly to the cumulative knowledge of the discipline and the targeted clientele?
9. Does the proposed study complement on-going research in the department or in other departments at WSU? Have relevant individuals or units been contacted for possible cooperation.

If you feel that you cannot complete a timely review of this proposal, please contact me at 000-000-0000 so that I may contact someone else to assist with this peer review.

Thank you.

Sincerely,
Abercrombie Anderson, Chair

WSU AGRICULTURAL RESEARCH CENTER
PEER REVIEW COMPLIANCE REPORT

PROJECT TITLE:
PROJECT LEADER:

CO-INVESTIGATORS:

Name _____ Department _____

Name _____ Department _____

COOPERATING DEPARTMENTS OR OTHER AGENCIES:

REVIEW TEAM:

Name _____ Department _____

Name _____ Department _____

Name _____ Department _____

What are the strongest features of this proposed research project?

What are the weakest points of this proposed research project?

Was a CRIS search conducted? If not, why not?

Were relevant departments at the University of Idaho and Oregon State University involved in the preparation and/or review of this proposal?

Signature of Project Leader's Department Chair/Center Director

**Suggested Memo Format - Program of Research Extension Request
(First – ARC Approved Extension)**

To: Director/Associate Director, ARC

Via: Department Chair or Director (obtain signature before sending to ARC)

From: Insert Principal Investigator's name (sign before sending to Chair/Director)

Date:

Subject: First One-Year Extension Request for Research Project

Please request a one-year Program of Research extension for WNP0____, entitled "_____ " to allow additional progress toward the objectives.

Approved – Chair/Center Director Date

Approved - ARC Date

MEMORANDUM

DATE: August 2009

TO: Department Chairs, R&E Directors, District Directors,
Travel Personnel, and Research/Extension Participants in
Multistate Travel

FROM: Ralph Cavalieri,
CAHNRS, Associate Dean for Research
Director, Agricultural Research Center (ARC)

Linda Kirk Fox
CAHNRS, Associate Dean for Extension

SUBJECT: ARC Policy for Multistate Travel Funds and Associated Flowchart

ARC and Extension faculty participation in Multi-State research projects and Extension Research (ERA) Committees is one of the ways we fulfill our mission by collaborating with scientists throughout the nation. A portion of the Hatch funds (ARC) and Smith-Lever funds (Extension) received from USDA Cooperative States Research, Education and Extension Services (CAREES) must be used to support approved Multi-State research and ERA activities and associated travel.

ARC and Extension cover the travel expenses proportional to the FTE percentage of the appointment of the traveler. Both Hatch and Extension travel funds are finite. Keeping track of reimbursements to research and/or extension accounts has become more cumbersome because of accountability procedures.

ARC and WSU Extension approval for Multi-State travel will be based on the following considerations:

1. Maintaining a current ARC project: To receive any funding from the ARC, all CRIS forms for new ARC proposals or progress reports for current ARC projects must be completed at the time of application for Multi-State travel funding.
2. The Agricultural Research Center (ARC) and WSU Extension will fund one faculty member per approved Hatch Multi-State project, National Research Support Project (NRSP), Coordinating Committee (CC), Development

Committee (DC), or Education/Extension and Research Activity Committee (ERA) for travel to an authorized annual meeting per year.

Consequently, travelers, department chairs, and station directors should use these guidelines.

1. The meeting must be authorized by the administrative advisor of the project or committee on the web-based National Information Management Support System (NIMSS) before travel requests will be considered. A simple email announcement of the meeting will not suffice as the authorization.
2. The department will prepare the paper TA signed first by the Department Chair or Director and sent to the ARC. The ARC Director and/or the Associate Dean for Extension will then review the TA for approval. ARC will then fax back a signed copy of the TA to the department.
3. Travel funds provided by the ARC or WSU Extension under this program are limited to \$1200 per trip authorized both by ARC and/or Extension. If the traveler holds appointments in both the ARC and Extension, funding will be split according to the traveler's appointment percentages. If the traveler holds appointments between ARC and Academic Programs in CAHNRS, the ARC will pay for the travel. In all cases, the total travel funding for airfare, food, lodging, and incidentals as allowed by WSU travel guidelines will be limited to \$1200. Funding for authorized travel under this program that exceeds the \$1200 provided by ARC and/or Extension must come from other appropriate sources such as authorized travel funds already written into grants or other departmental funds.
4. Travel to and from the annual meeting must be by the least expensive mode of travel unless prior approval has been received. For example, if airfare to a meeting is \$300 and a rental car charge would be \$500, we would pay for the airfare or reimburse \$300 of the rental car charge. We expect reservations to be economical.

Please note that when traveling outside the country or domestically, U.S. carriers must be used per USDA requirements.

5. **In order to have airfare reimbursed it must be charged to an approved ARC Multi-State project and/or the Multi-State Extension budget (new this year).** One way to ensure this is to have the travel agent call Ellen Yeates at ARC and she will first check to see that all approvals are in place from the ARC/Extension areas. The airfare can then be put on the Multi-State CTA. The

other way is to use your WSU corporate card and have the airfare included on your TEV. Before ARC can authorize our account for your airfare, we must have (a) **The authorization memo from the Multi-State Administrative Advisor recognized on the web-based NIMSS system** and (b) **A copy of your TA signed by the department chair** in our office (a faxed copy is sufficient).

6. Approval is generally given to stay in the lodging facility where the meeting is being held to achieve maximum benefit of having a business interaction with the other travelers on the project or committee.
7. Quite often Multi-State meetings are in conjunction with other professional meetings. This is one of the benefits of participating on a Multi-State project or ERA committee because we can reimburse travel to and from the authorized meeting and its associated expenses. The traveler, therefore only incurs the per diem and registration expenses of the professional meeting.
8. All budget and expense paperwork must be processed through ARC administration. **Reimbursement of expenses may be delayed, partially reimbursed, or denied** if your TA is not submitted for approval to the ARC or in PTRS before the trip and/or your TEV paperwork is not submitted through the ARC office for payment. Ellen Yeates is the designated contact for Multi-State Travel and also has access to Informed Filer, for those of you with electronic submission of Travel Expenditure Vouchers (TEV). The TEV must be processed through ARC, not the Business and Finance Office (BFO).

Exceptions to this policy must be reviewed and approved in writing preferably by email by the Director of the ARC; and if an Extension appointment is involved, by the Associate Dean for Extension, CAHNRS.

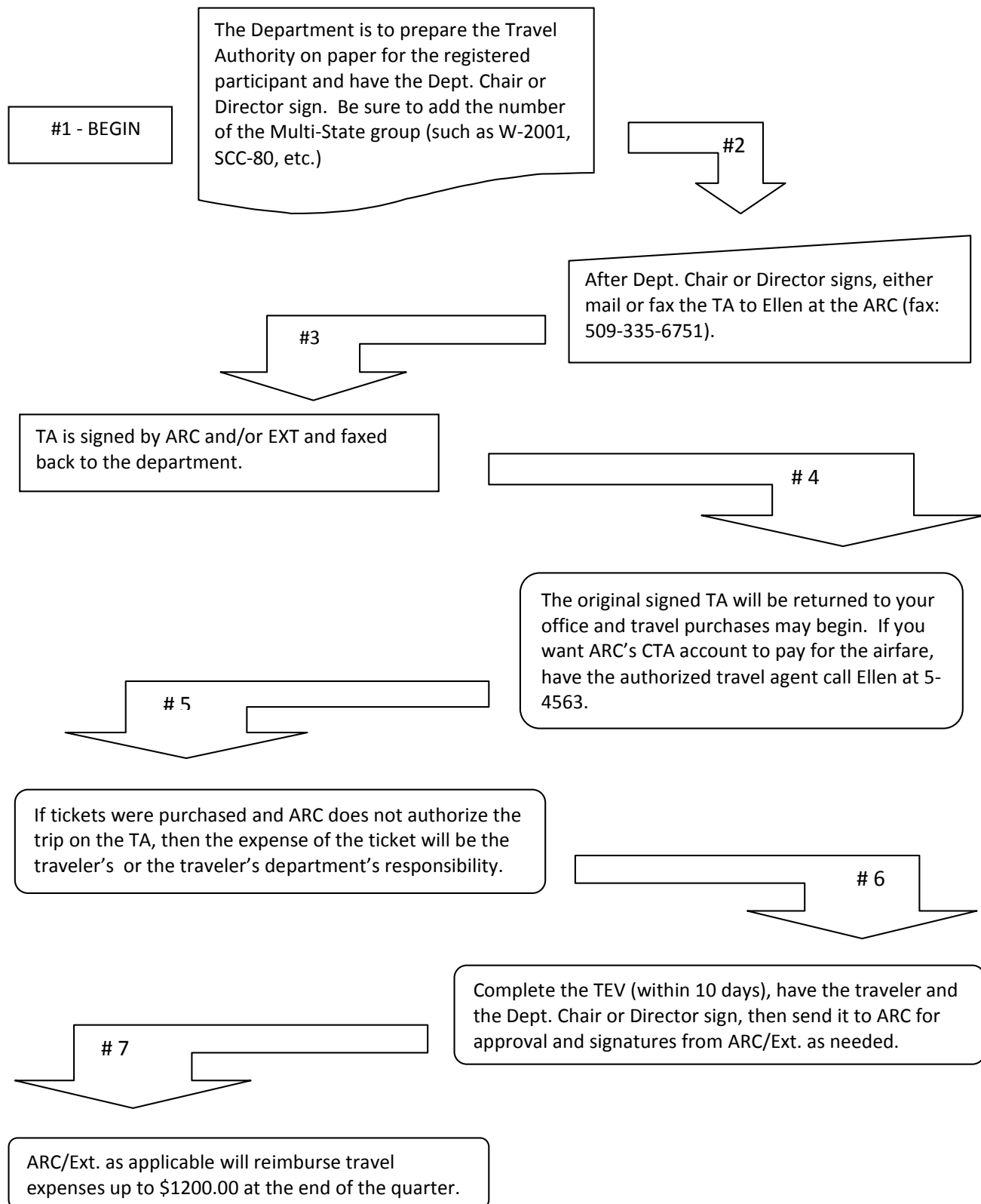
In addition to the above requirements, when an exception is requested, the following will also be considered:

Productivity associated with the Multi-State Project or Committee: Please list any publications the traveler has authored within the past three years or grants the traveler has received within the past three years as a result of the affiliation with the Multi-State research project, coordinating committee, or ERA committee to which the travel funding is requested. Attach this information to your Travel Authority (TA).

Although the above procedures are not new, this memo has been sent out as an annual reminder. If you have any questions please do not hesitate to call Ellen Yeates at: 509-335-4563.

NOTE TO ARC/RESEARCH/EXTENSION TRAVELERS: Please remember to tell the person doing your travel paperwork that your trip is Multi-State travel and to please send this paperwork to Ellen Yeates in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) ARC mail stop 6240, not Business and Finance (BFO).

Flowchart for Processing Travel Authorities (TA's) for **Multi-State** Trips



Multistate Training Handout – Updated for 2009

FAQ's

1. What is considered Multi-state Travel (project and committee travel)?

Multistate Travel is usually the trip a registered participant takes to attend the authorized annual meeting of their Multistate research project or Multistate committee group.

2. If the registered participant cannot attend, can someone else go in their place?

The participant is usually the main PI or designated WSU representative and must be currently registered on the project or committee. If an exception is requested for another to attend in their place then the one of the following will apply:

1. Another currently registered participant can attend without any additional special request to ARC other than the usual TA with a comment that they have been given the approval to attend the meeting by the PI and will be authorized to use the project budget for their expenses.
2. The traveler is not at registered participant. Then approval must be made by ARC/Extension administration in writing, preferably by email. (Sometimes a graduate student will be attending to do a presentation on behalf of the PI.) It may be in the best interest of the traveler to join the project officially if they are faculty and may be contributing in the future or need an ARC project for funding.

Exceptions to this policy must be reviewed and approved in writing by the Director of the ARC; and if an Extension appointment is involved, by the Director or Associate Director of WSU Extension. Please review the Travel Memo for additional procedural information.

3. What if more than one participant wants to attend the meeting?

More than one participant can attend the meeting, but only one will have their travel expenses reimbursed by ARC. The other participant(s) must find funding from other sources in their own department or grants. The TA's should specify which traveler has been designated as the Multistate participant for ARC funds.

4. How do I get a participant registered on a project so they can go to the annual Meeting?

Submit a participant's Appendix E (signed first by their Dept. Chair or Director) to the ARC for the Ag Experiment Station Director (Ralph Cavalieri) to sign to approve their addition. If the participant also has any or all of their appointment with Extension, then the Extension Director (Linda Fox) here will also sign. The participant must have the Appendix E done and in the NIMSS system and a TA sent to ARC before funds will be authorized for their travel. If the TA comes in at the same time as the TEV, expenses will be reimbursed at the discretion of the director.

5. What Multi-state events are paid for by ARC/Extension?

The Multistate event most often paid for by ARC/Extension is the authorized annual meeting of their group. On occasion (and as an exception with prior approval from ARC/Extension) funds may be authorized for a participant to attend a meeting to produce a publication or a rewrite/revision of the current project or committee.

6. Where can I find the most current Travel Policies?

There is a copy of the most current Multistate travel policies on the ARC website at: <http://www.arc.wsu.edu/info/multistate/index.htm>.

In your departments, there should also be a printed copy of the Memo that is emailed every year for your records in August along with any updates throughout the year.

7. How am I able to use the project's budget if it shows as overdrawn for the travel expenses?

It may be a possibility that the project budget and/or Extension operating budget gets overdrawn for Multistate travel expenses. However, these expenses are reimbursed at the end of the quarter by ARC/Extension up to the maximum reimbursement amount (currently \$1200.00) through a journal voucher entry. You need to use the project budget so we can show that Multi-State monies are being used on behalf of the program. Any expenses over the maximum remain as an expense on the budget so it still may show some negative amount if no additional funds are allocated.

8. How do I do the TA (budget numbers, travel dates, exceptions, annual leave, current with paperwork for project, foreign travel) for a Multistate trip?

When completing the TA to request approval for Multistate Travel and request ARC/Extension funding, be sure to check the following items before sending it to ARC:

- A. Is the participant registered on the project and has their progress reports for current projects or CRIS reports for new projects done so they can go?
- B. Check the participant's appointments to determine the percentages of Teaching, Research, and Extension they have.
- C. Be sure to list the correct project number in the Account Section – and your Extension Operating Budget number as well if there is a percentage of their appointment with Extension. Call ARC if you are not sure which budget to use.
- D. Travel dates can be listed as one day before and one day after the meeting.
- E. If they have another professional meeting in conjunction with Multistate, be sure to list that in comments. Include a statement of which expenses will be charged against the other meeting and be sure to list the other meeting's budget. Give details of any exceptions: Personal leave around the meeting times, the request of a rental car, registration to be paid on the TEV (along with the registration paperwork) and accommodation details if something is unusual.
- F. Have the Department Chair sign before sending it on to ARC. When ARC receives the TA, it will be signed by ARC and Extension if needed and sent back to your department. We can then work on purchasing other travel items such as tickets and registration.

9. How does ARC pay airline charges for me and determine airfare reimbursement?

The best procedure is to have ARC purchase the itinerary you work out with a WSU approved travel agency. (This only happens after the TA is submitted and signed by the ARC Director.) The agent can call Ellen Yeates directly at 509-335-4563 and it will be charged to the ARC CTA account. Through PaymentNet, it will be split out accordingly to all applicable budgets in the correct percentages as listed on the TA. This avoids the mistake of the participant buying their own tickets through sources not WSU approved no matter the price. It also helps the departments especially if ARC is responsible for all the expenses of an annual Multistate Committee instead of an annual Project meeting.

ARC will pay for travel to and from the Multistate event but additional travel as it applies to another meeting will be charged to that meeting or not reimbursed if it applies to personal leave– for example: rental car or another plane ticket or an additional leg of a flight. Flight reimbursement will be calculated as roundtrip from the Multistate meeting location. Additional documentation from the travel agent may be required to make the determination if other legs of travel have been purchased at the same time for

another meeting. The travel agent should produce a simulated itinerary with the pricing for the basic roundtrip without the additional legs for another meeting or personal trip.

10. How are Multistate TEV's completed (receipts, explanations, per diem rates, signatures)?

Use your signed TA copy that I return to you as a guide in completing the TEV. This will have the most accurate information if changes were made at ARC after you sent it in for signatures. You will especially need to refer to the account numbers and the percentages charged to each account. Also check on the distribution of expenses if another meeting or personal leave needs to be taken out of the Multistate calculations. Look in the Exceptions area for additional comments that can affect the way monies are split – including subtracting out personal expenses for annual leave. Include another budget number as needed if expenses (including pre-purchased items such as airfare and registration) will go over the maximum reimbursement amount and you want some other account other than the project budget to pick up the remainder.

Be sure to double-check the per diem rates for each city where meals are claimed. Alaska and Hawaii are unusual and use a foreign rate classification. If you are not sure, please call the Travel Dept. or ARC for help in determining rates. (For foreign meals, be sure to add the meals and incidentals amounts together for the total meal rate before applying the percentages for each meal : 25% Breakfast, 30% lunch, 45% for dinner.

Reimbursement from ARC/Extension for Multistate travel per trip at this time will not exceed \$1200. This includes any expenses that have been prepaid for the participant that does not show on the TEV such as airline ticketing and registration fees.

Signatures are needed by the traveler and the Department Chair before submitting to ARC for review. It is very important to get the TEV processed within 10 days of the trip – otherwise, you may miss the reimbursement date for that quarter or not get reimbursed at all if it misses the fiscal year end. I send out reminders as the end of the quarter nears for any trip that has been authorized but expenses not submitted. If cut-off dates are missed or the TEV is very late in being submitted, the ARC/Extension Directors may choose not to authorize reimbursement. It is up to each department to encourage their participants to turn in their receipts in a timely manner to process the paperwork.

11. The participant is claiming an exact amount for food instead of the per diem amount. Which rate should I use?

If the amount is lower than the per diem rate, ask your participant if they are sure they want to under-claim. If they want to claim more than the per diem rate (even if they produce the receipts) they will only be paid the per diem rate for that area. Put a notation in the "Travel Details" area of the TEV to explain that actual meal expenses are claimed if under the per diem amount for that area.

12. When do I get the money back in my ARC project budget?

You receive copies back of the signed TA and TEV as they are processed. Your monthly budget pages will show charges for airlines, etc. as we go. Please compare your calculations with mine. When you receive the reimbursement memo at the end of the quarter, I show the participant and the combined amount being reimbursed for Cost (per diem) and Airfare (including ticketing fees) as they apply to your project budget. Call immediately if your amounts differ and we can work it out. Sometimes Travel makes an adjustment in an item on the TEV.

Reimbursements are paid at the end of each quarter:

July-Aug-Sept 1st Quarter travel is reimbursed the first part of October
Oct-Nov-Dec 2nd Quarter travel - the first part of January
Jan-Feb-Mar 3rd Quarter travel - the first part of April
Apr-May-Jun 4th Quarter travel - the first part of July – **before the fiscal year cutoff.**

13. What if my department had already made purchases on an administration or other budget for expenses before I had processed the TA for authorization of the trip with the correct accounts to use?

This can be avoided if the correct procedures are followed from the beginning in getting authorization for the trip to be taken at all. However, if this does happen for some reason, please give ARC a call and we can determine the best procedure.

Most times, if the accounts are within your own department, (administration budget to a project budget) you can shift the expenses to the correct budget by processing an ETR without getting ARC involved. If the expenses will be for Multistate Committee trip, the ARC Multistate budget is involved and the ETR will need to be sent here for signature that we agree to accept the charges – please call to verify the correct ARC account to designate for the transfer. From there, the correct budget can be reimbursed by ARC.

Please note that only 10A accounts for ARC and 09A accounts for Extension can be reimbursed on behalf of ARC/Extension.

14. Can the ticket be purchased on a traveler's WSU corporate card and be reimbursed?

Yes, just include the documentation with the TEV and show the cost in the "Other Expenses" section of the TEV. For your review, the following applies to the Card:

The WSU Travel Charge Card is a personal liability Visa card issued to WSU employees to be used for payment of expense incurred while traveling on behalf of WSU.

Allowable Purchases: Lodging, Meals, Rental Cars, and Airfare through a GA approved travel agency or directly from an airline.

Prohibited Purchases Include: Personal Items, Non-Official Travel Related Items (Room service, alcoholic purchases, etc...), and Non-Business Related Telephone Calls

What are the Benefits of Having a WSU Travel Charge Card?: Travelers have the ability to secure reservations, no need to use personal funds for WSU travel expenses, eliminates the need for travel advances, allows travelers to make on the spot travel related purchases, and eliminates the need to have a Budget Rental Card to secure rental cars.

15. What are some things NOT to do.

Taking a Trip:

A participant should not go on a Multistate trip without first getting a TA authorized to pay for expenses when they return (if they want reimbursement by ARC.) At this point, the ARC is under no obligation to reimburse expenses and the TEV will be flagged for special consideration by the ARC/Extension Directors to decide if reimbursement will be given.

First class tickets are not approved. Only use U.S. Carriers for airline travel unless situation does not offer U.S. transport (travel within a foreign country).

Do not stay at a non-headquarters hotel at higher rates without explanation. Travel requires paperwork showing that it was the best available published rate (you can use copies of internet pages) before it is decided that it is reimbursable at above per diem rates. Also, if proximity to the

main hotel is still more cost effective than travel expenses to and from a less expensive hotel, then list this explanation in the Details area of the TEV.

Do not charge personal expenses on WSU travel cards. It is prohibited.

Do not wait more than two weeks to submit a TEV

Airline Tickets:

The purchase of airfare using personal resources is strictly prohibited by WSU. Purchasing airfare with personal financial resources or from non-approved agencies: In emergencies only, **use personal resources to pay for common carrier tickets. Please see below for clarification from WSU Travel.**

Section 10.50.75 - Dated January 1, 2004

May the traveler purchase airfare from personal financial resources?

Except as provided in [Subsection 10.50.70](#), a traveler may only use personal financial resources to purchase airfare in emergency situations when the State Charge Card System is not accessible. It will be up to the agency's management to authorize reimbursement of charges made with personal financial resources.

When a traveler is billed individually and seeks reimbursement for purchase of airfare, the traveler must attach receipts to the Travel Expense Voucher (form A20-A or A20-2A) or reference the agency file location.

If a traveler is unwilling to obtain a State Travel Charge card all airfare purchases must be charged to the departmental CTA.

Continued purchasing of future airfare using personal financial resources or non-approved travel agencies will be sent to the internal auditor's office for review.

16. For other questions, please contact the ARC at 509-335-4563, eyeates@wsu.edu

Updated: Aug. 2009