

FORMAT FOR HATCH PROJECTS

Note: Project proposals are 15 pages maximum. The standard for all printed materials is Calibri, 11-point font size, or Times New Roman or Arial, 12-point font size. Pages should have one-inch margins, single-spaced text and at least 6 points between paragraphs and before/after headings. PLEASE INCLUDE PAGE NUMBERS.

- I. PROJECT TITLE: A brief (140 letters and spaces or fewer), clear, specific statement of the subject of the research. Avoid terms such as "Research on" or "Studies of", or "Investigation of..."
- II. PROJECT TYPE: Hatch

III. PRINCIPAL INVESTIGATOR(S), DEPARTMENTAL AFFILIATION(S), AND CURRENT APPOINTMENT

(Note: Include all co-leaders and other UNL faculty contributors)

PI name: Department: Campus or Center Address: Email address: Current appointment: ____ FTE Research; ____ FTE Teaching; ____ FTE Extension; ____ FTE other

IV. STATEMENT OF THE ISSUES AND JUSTIFICATION (1 page maximum)

This section should explain why the work needs to be done, and should include statements on the following points:

- The need as indicated by stakeholders. (i.e., explain how the proposed research addresses national and/or regional priorities developed following stakeholder input.)
- The importance of the work, and what the consequences are if it is not done.
- The technical feasibility of the research.
- The likely impacts from successfully completing the work.

V. RELATED CURRENT, AND PREVIOUS WORK (2 page maximum)

A summary of findings from a REEIS search (formerly CRIS) is required (<u>http://www.reeis.usda.gov</u>). The REEIS search summary should identify work being conducted to meet objectives similar to yours. If the REEIS search provides limited results, describe findings from elsewhere (including your own preliminary studies) that are supportive of the feasibility for the research. This section should help to define the problem under study and explain how your proposed work will supplement and extend previous work. If the proposal is for continuation of a project, the accomplishments achieved under the previous project should be reviewed with identification of those areas requiring further investigation. List essential, cited references (see <u>Section XIV</u>). A classical in-depth literature review should not be included within your project outline.

VI. Goals/Objectives (2 page maximum)

Provide a clear, concise statement of the goals/objectives of the project. You may use paragraph format or bulleted or numbered lists. There is no minimum or maximum number of goals to include for a project, but all goals should be specific and attainable within the duration of the project and with the available resources that has been made available to you. In general, goals should answer the question: What major achievements and milestones does the project hope to realize? Do not specify exchange of information, coordination of research, or joint publication as objectives.

VII. 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 <u>Efforts</u> 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 <u>Evaluated</u> and/or quantified for its impact on the intended audience(s).

Defining "Efforts": Efforts include acts or processes that deliver science-based knowledge to people through formal or informal educational programs. Examples include: formal classroom instruction, laboratory instruction, or practicum experiences; development of curriculum or innovative teaching methodologies; workshops; experiential learning opportunities; extension and outreach.

Defining "Evaluation": Demonstrating that evaluation will be part of your project means that you describe the plan/steps to be used to evaluate or "measure" the success of the project. Provide a listing of the types of evaluation studies planned and types of data that will be collected, emphasizing key milestones and measurable or quantitative indicators of success. The project evaluation plan should relate milestones and indicators of success to expected project outcomes/accomplishments and impacts.

Summarize the research methods that will be used to address each of the objectives. Explicit information should be included to enable the reviewers to evaluate the approach and the potential for successful completion. It is expected that methods for completing the objectives in the first 2 or 3 years of the project will be described in more detail than those for the later objectives. It should be made clear to reviewers how completion of initial objectives will lead into the later objectives.

VIII. Target Audience

Provide a description of the target audience(s) that will be the focus of effort for the duration of the project.

Target audiences include individuals, groups, market segments, or communities that will be served by the project. Where appropriate, you should also identify population groups such as racial and ethnic minorities and those who are socially, economically, or educationally disadvantaged.

IX. Products

Identify the standard products/outputs that are expected to be achieved during the life of this project. "Standard products" includes only major publications, patents, and applications for plant variety protection (PVP).

NIFA definition of "major publications"

Publications are the characteristic product of research. Agencies evaluate what the publications demonstrate about the excellence and significance of the research and the efficacy with which the results are being communicated to colleagues, potential users, and the public, not the number of publications.

Journal publications: Peer-reviewed articles or papers appearing in scientific, technical, or professional journals. Include any peer-reviewed publication in the periodically published proceedings of a scientific society, a conference, or the like. A publication in the proceedings of a one-time conference, not part of a series, should be reported under "Books or other non-periodical, one-time publications."

Books or other non-periodical, one-time publications: Any book, monograph, dissertation, abstract, or the like published as or in a separate publication, rather than a periodical or series. Include any significant publication in the proceedings of a one-time conference or in the report of a one-time study, commission, or the like.

Other publications, conference papers and presentations: Identify any other publications, conference papers and/or presentations not reported above.

X. Outcomes

Provide a description of Expected Outcomes over the duration of the project. NIFA considers the terms "outcomes" and "accomplishments" to be synonymous. An outcome/accomplishment is defined as a significant change in knowledge, action, or condition. Outcomes are generally short, succinct statements that start with phrases indicating the occurrence of change. Examples of such phrases are:

"Increase in the numbers of acres that ... "

"Decrease in the amount of children that ... "

"Increased profits from the sale of ... "

<u>Change in Knowledge</u>: For a research project, a change in knowledge can be a breakthrough understanding in scientific knowledge. For education or extension projects, a change of knowledge occurs when recipients of an education or extension activity demonstrate significant learning/information gain in understanding.

<u>Change in Action</u>: A change in action occurs when a significant change in behaviors or practices results from the project's activities.

<u>Change in Condition</u>: A change in condition occurs when a significant change in a condition of societal concern results from the project's activities. If appropriate and available, outcomes should be supported with key, quantitative data, such as number of acres impacted, increased profits, or number of people impacted.

In terms of how the outcome types relate to each other, NIFA considers the highest achievement of any research or extension project to be an outcome categorized as change in condition. This is because a change in condition signifies that changes in action and learning occurred in order to perpetuate the change in condition. The secondranked outcome type is change in action, and the third is change in knowledge. These rankings are not meant to diminish the importance of changes in action and knowledge. Rather, they are there to show that if you can demonstrate a change in condition, then it is not necessary to also list all the minute associated changes in action or knowledge. Likewise, if you can demonstrate a change in action, it is not necessary to list all the minute associated changes in knowledge.

XI. Non-Technical Summary

The non-technical summary is your opportunity to briefly sum up the importance of your project in terms that general citizens can understand (i.e. citizens without scientific backgrounds). A good non-technical summary is composed of 1-2 succinct paragraphs that cover three main points:

- 1. What is the current issue or problem that the research addresses and why does it need to be researched?
- 2. What basic methods and approaches will be used to collect and produce data/results and subsequently inform target audiences?
- 3. Through the methods mentioned above, what ultimate goals does the project hope to achieve?

In answering the above three questions, make sure to provide enough detail so that you are touching upon the main purpose of the project, the expected accomplishments, and anticipated benefits of the research.

Remember that this non-technical summary is designed to enhance the usefulness of the information in the database, especially to legislative and other public audiences.

XII. MEASUREMENT OF PROGRESS AND RESULTS: (1 page maximum)

Milestones: Timeline-linked accomplishments that need to be completed before subsequent activities can begin, or can be completed.

Use the following format to provide an approximate timetable for the proposed work by objective. Indicate the work to be accomplished first.

Work to be accomplished	Year 1	Year 2	Year 3	Year 4	Year 5
Objective 1 Work to be accomplished Work to be accomplished Etc.	xxxxxxxxxx xxxxxxxxxx xxxxxxxxxxxxxxxx				
Objective 2 Work to be accomplished Work to be accomplished Etc.	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx				
Objective 3 Work to be accomplished Work to be accomplished Etc.	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX				

XIII. CURRENT AND/OR POTENTIAL COLLABORATORS

Do not include UNL faculty in this section (See Section III for listing UNL contributors). List names, discipline and institutional affiliations of individuals or groups who currently collaborate or who might be possible collaborators. State ways in which multidisciplinary collaborations might enhance the project.

XIV. REFERENCES CITED – use a standard format from a professional journal or grant application

XV. FINANCIAL SUPPORT

Use the <u>Hatch Project Resources Form</u> to indicate anticipated resource needs for each year of the project. The purpose of this form is to assist you and the reviewers in determining the feasibility of the research from a resource perspective.

XVI. APPROVALS

Use the <u>Hatch Project Approvals Form</u> to route for applicable Department/Unit Head signatures. If the Team Hatch project includes faculty from more than one department, all Department Heads should sign.