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# HATCH PROPOSAL GUIDELINES

## VIRGINIA AGRICULTURAL EXPERIMENT STATION (VAES)

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### KEY REQUIREMENTS:

- Capacity projects (Hatch/Multistate/McIntire Stennis/ Animal Health & Disease) cannot use another federally funded project to complete the proposed work.
  - Examples of approved funding include:

Start-up funds	Commercial entity	Private Funding	Foundation
Field Trial	Commodity Grant	VT Internal	Pratt Funding
  - While you *cannot* report activities directly supported by another federally-funded grant, consider activities related to, but not listed within, the federally-funded objectives.
- Many projects create preliminary data for new/emerging research interests.
  - Hatch projects have a 5-year duration.
  - The project should create value for your research program.
  - Consider the budget for the proposed work and creative ways to manage the budgetary constraints for fulfilling the project.
    - Undergraduate research projects
    - Commodity Board or VT/CALS or Institute Seed Grants, etc.
- Plan to provide value to preliminary/secondary stakeholders through products, outputs, and outcomes/impacts.
- The proposal is shared publicly and should not include proprietary data.

### REASONS THIS HATCH PROPOSAL IS IMPORTANT TO YOU:

1. It is tied directly to your faculty position, which is funded either partially or fully by USDA Capacity Funds.
2. Tenure-track faculty with 20% or greater research appointment must maintain an active Hatch or Multistate project.
3. New faculty (tenured or tenure track) are required to develop an individual Hatch project within 13 months of their start date.
4. **Faculty without an approved Capacity Fund Project (Hatch or Multi state) may not be eligible for an annual raise or other potential support funded through VAES** (graduate student support, equipment, etc.).
  - \*See Policy on Hatch & Multistate Research Program, effective Fall 2021 for details.
  - Each project type (individual PD Hatch/Multistate) has variations in the guidelines.

### THINGS TO KNOW BEFORE SUBMITTING YOUR HATCH PROPOSAL:

- Submission is a three-phase process.
  - Phase 1: VAES internal review
  - Phase 2: Virginia Tech Peer Review
  - Phase 3: USDA NIFA review and final approval
- The 3-phase internal review process typically takes 3 – 5 months.
- Hatch proposals are submitted for VAES review via Submittable (*internal system*).
- **Make certain you are following the correct guidelines for the project type you are proposing.**

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## TECHNICAL DETAILS

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THE HATCH ACT IS ALIGNED WITH THE FOLLOWING: USDA STRATEGIC PLAN FY 2022-2026 [found online](#)

**STRATEGIC GOAL 1:** COMBAT CLIMATE CHANGE TO SUPPORT AMERICA'S WORKING LANDS, NATURAL RESOURCES & COMMUNITIES

**STRATEGIC GOAL 2:** ENSURE AMERICA'S AGRICULTURAL SYSTEM IS EQUITABLE, RESILIENT, & PROSPEROUS

**STRATEGIC GOAL 3:** FOSTER AND EQUITABLE & COMPETITIVE MARKETPLACE FOR ALL AGRICULTURAL PRODUCERS

**STRATEGIC GOAL 4:** PROVIDE ALL AMERICANS SAFE, NUTRITIOUS FOOD

**STRATEGIC GOAL 5:** EXPAND OPPORTUNITIES FOR ECONOMIC DEVELOPMENT & IMPROVE QUALITY OF LIFE IN RURAL & TRIBAL COMMUNITIES

**STRATEGIC GOAL 6:** ATTRACT, INSPIRE, AND RETAIN AN ENGAGED & MOTIVATED WORKFORCE THAT'S PROUD TO REPRESENT USDA

PLEASE FOLLOW THE BELOW FORMAT LIKE YOU WOULD AN RFP (HEADERS/SUB-HEADERS/CHARACTER LIMITS, ETC.)

**1. TITLE**

A brief description of the research that clearly reflects the objectives and scope of the project.  
(maximum 180 characters, including spaces)

**2. NON-TECHNICAL SUMMARY**

See Appendix A for details (maximum 7,500 characters, including spaces)

This may be the most important section of your proposal because it can be accessed by legislators who make decisions about funding allocations, the general public, community leaders, and taxpayers, governmental staff, and other scientists. This non-technical summary is your opportunity to sum up the importance of your project in terms that general citizens, without a scientific background can understand.

The non-technical summary must include the below sub-headers:

a. **Problem Statement(s):**

What is the issue, and why is it important? This section briefly discusses the current issue or problem that the research will address, and why it needs to be studied now.

b. **Relevance to advancing Virginia/Region and the United States (U.S.):**

Why is this topic important to Virginia and the U.S? Address at least two of the following:

1. Economics
2. Community
3. Environment
4. Agriculture

c. **Approach:**

The basic methods and approaches used to collect and produce data/results and subsequently inform the target audience. Keep in mind this section is for a non-technical audience.

(DO NOT cut & paste your objectives, technical methods, or procedures).

d. **Anticipated outcomes and impacts:**

What are the ultimate goals this project hopes to achieve through the described approach?

What is the general impact of meeting the goal and the societal benefits to realize?

### 3. MAJOR GOALS AND OBJECTIVES

See Appendix B for details

Provide a clear, concise statement of the major goals for the project which encompasses a broad perspective of what purpose, service, major achievement, or milestone the project will meet. **Following the goal statement, share the objectives of your project using numbers (either list or paragraph format).**

Goals are broad, more general, and difficult to measure; whereas objectives are clearly measurable.

Target a 5-year duration for the scope of the project goals & objectives.

### 4. TARGET AUDIENCES

See Appendix C for details

Provide at least three (3) primary and one (1) or more secondary audiences to be served by the proposed project and describe how the target audience will benefit from your research findings. They may include individuals, groups, market segments, or communities. Identify population groups when possible. The list should be broader than the scientific community.

### 5. PROPOSAL TECHNICAL PORTION

*Section should be 2- 10 pages*

#### Previous Work and Present Outlook:

This paragraph reflects the status of the current research and provides a brief technical summary of the previous research (2-4 pages suggested). It cites important publications and highlights any additional knowledge needed (gaps in literature) that the project expects to provide.

The following section should include non-proprietary, preliminary data, as applicable. It should also help a scientific reader outside of your discipline to understand the unmet and relevant needs.

**Do not include proprietary data in your Hatch proposal.**

Literature citations/references may be listed at the end of the project description.

- a. Include ***estimates*** of economic impact in Virginia, the region, or the U.S. Provide some indication of how the research proposed relates to economic impact.
- b. Examples include:
  - a. Loss of work, loss of product, the increased value of product/technology, new product market, time savings from a technology, expanded employment, savings related to healthcare, etc.

### 6. METHODOLOGY

*(maximum 7,500 characters, including spaces)*

Define the essential working plans and methods proposed to attain each objective to reach the targeted goals. Describe how the project will be conducted, emphasizing the general scientific methods and any unique aspects or significant departures from usual methods.

Procedures should correspond to the objectives and follow the same order.

#### Identify and describe:

- a. Phases of the work plan and sequencing, as appropriate.
- b. The location of the work, the facilities and equipment needed, and if they are currently available.
- c. Experimental design, including methods used and how results will be analyzed, evaluated, or interpreted.

### **Statistical Analyses**

- a. Designate this section with a sub-header under Methodology.
- b. The proposal and statistical plan must be reviewed by a VAES-approved reviewer (SAIG or other designated).

### **Potential Difficulties, Limitations, and Alternative Plans**

- a. Designate this section with a sub-header under Methodology.
- b. This area may reflect any expected difficulties, known limitations, or potentially alternative plans.

## **7. OUTCOMES AND PRODUCTS**

See Appendix D for details (*maximum 5,000 characters, including spaces*)

This section must include the below sub-headers:

### **a. Outcomes:**

USDA considers “outcomes” and “accomplishments” to be synonymous.

**Outcomes are generally short statements indicating the occurrence of change.**

If possible, describe how the outcomes will impact and/or contribute to the resolution of future challenges or create future opportunities. (20 years from now).

### **b. Products:**

USDA considers “products” and “outputs” to be synonymous.

What is the anticipatory impact the project is expected to lead toward? Identify things likely to happen within a year or two upon completion of the project.

**Products include:**

- Activities
- Events
- Services
- Products that reach others

Include dissemination approaches to the broader audience.

*For example, a partnership in developing presentations, Extension publications with VCE, participation in an AREC field day, a community event, or a college or institute activity/event.*

## **8. PROJECT EVALUATION PLAN**

Describe the plan/steps to evaluate or measure the success of the project toward the stated goals. What are the plans for disseminating the outcomes and impacts to the target audience?

Include key milestones and measurable or quantitative indicators of success. The project should relate milestones and indicators of success to expected outcomes/accomplishments and impacts.

## **9. PROBABLE DURATION**

Five years

## **10. TIMELINE**

Include a GANTT Chart-style timeline.

**Do not specify years or months because the date of approval is unknown.**

Instead, reflect Year 1, Year 2, Year 3, Year 4, Year 5.

## 11. FINANCIAL SUPPORT

Include the estimated 5-year total scientist-years (SY), professional years (PY), and technical/clerical years (TY) percent effort proposed for the effort.

Identify the number of students in each category (Undergraduate, Graduate, Postdoctoral Scientist) expected to work on the project.

*The SY, PY, TY commitments should reflect the commitment as **cumulative for the duration of the project** rather than yearly on any VAES Project. This is for all participants regardless of status (with the exception of volunteers), that will devote time to the project.*

A description is as follows:

SY = Scientist Year (Faculty time) **SY time cannot exceed the amount of research time a person has,**

PY = Professional Year (Grad. Stud., Post Doc, Or Research Assoc.) and

TY = Technical Year (Classified).

*The SY, PY, TY time is not affected by who will receive funding or even the Source of funding. NIFA simply wants to know the amount of research time, (by these categories), being supported on each project.*

Note: It is not necessary or required to have all 3 categories represented in any given proposal.

## 12. PERSONNEL

Include the Project Director (PD) who will lead the proposed effort and other technical workers on the project.

## 13. INSTITUTIONAL UNITS INVOLVED

List each subject-matter unit in the Virginia Agricultural Experiment Station and any other unit (centralized laboratories, institutes, etc.) of Virginia Tech contributing essential services or facilities. If there is an advisory, coordinating, or directing committee for the project, include the official title of the committee. The responsibilities of each should be indicated.

## 14. COOPERATION

Include a statement listing the U.S. Department of Agriculture or other stations, institutions, or agencies cooperating on the project. If a Multistate Project is cooperating, please reflect the Multistate Project number.

## 15. INTERNAL

Please add a section describing your plan for the project funding. It's good to suggest a general budget plan.

**This section is for internal use only, but helps VAES see how you anticipate supporting the project without federal funding. Remember, funding from another federal source is not allowed for this project.**

If you have startup funds, industry grants, foundation grants, etc. that align directly with this project, it is acceptable to report here.

If you have GTA or GRA funding pledged from some university source, identify them.

When you publish or communicate information, you must acknowledge the Hatch project, as well as the other funding sources. Our goal is to know that you have a plan for funding the actual work.

## 16. REFERENCES

Include the literature citations/references used within the proposal.

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## APPENDICES

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### APPENDIX A

#### **Non-Technical Summary**

The non-technical summary shares 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?**  
When answering this question consider a perspective that goes beyond the primary end-users of the science you are conducting. Why is this topic important to the larger community in terms of economics, community and environment as well as agriculture?
2. **What basic methods and approaches will be used to collect and produce data/results and subsequently inform target audiences?**  
This should be different from your objectives list. Do NOT copy and paste the same text here. This section should explain, in plain, non-technical language what you intend to do.
3. **Through the methods mentioned above, what ultimate goals does the project hope to achieve and what is the general impact expected to be if this goal is met? What societal benefits may be realized?**

In answering the above 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, this summary may be the most important section of your Hatch proposal.**

This non-technical summary will be accessed by legislators who make decisions about funding allocations, general public, community leaders, and taxpayers as well as government staff and other scientists.

### APPENDIX B

#### **Goals**

NIFA defines “major goals” as the over-arching goals of the project and the objectives that will be undertaken to achieve those goals.

Provide a clear, concise statement of the major goal(s) of this project. This should encompass a broad perspective of what purpose, service, major achievement, or milestone this project will provide. Following your goal statement, please list the objectives of the project using numbers for each in either list or paragraph format. Most goals have multiple objectives. Objectives are measurable, whereas goals are broad, general, and difficult to measure. There is no minimum or maximum number of objectives to include for a project, but all objectives should be specific and attainable within the duration of the project and with the available resources (refer back to your estimated FTEs for project duration and the amount of capacity funding that has been made available to you.)

## APPENDIX C

### Target Audience

The target audience(s) you describe should include all those that your efforts will reach over the course 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.

## APPENDIX D

### Outcomes and Products

**Outputs** are activities, events, services, and products that reach people.

1. **Activities** include conducting and analyzing experiments or surveys, assessments, facilitating, teaching, or mentoring.
2. **Events** include conferences, demonstration sites, field days, symposia, workshops, and trainings.
3. **Services** include consulting, counseling, and tutoring.
4. **Products** include: audio or video products; curricula; data or databases; equipment or instruments; patent applications; applications for Plant Variety Act protection; models; networks and/or collaborations fostered by the project or activity; physical collections or resources, new animal germplasm, or genetic maps; software; technology, methods, or techniques; train-the-trainer manuals; website(s) with the appropriate URL(s); information, skills, and technology for individuals, communities, and programs; or students graduated in agricultural sciences.

#### POLICY NOTE:

Proper acknowledgement of your public funding in published articles, manuscripts, dissertations, posters, presentations, inventions, patents, and press releases is critical for the success of the agency's programs. As your project progresses, please use the following language to acknowledge NIFA support in such publications, as appropriate:

**This work is/was supported by the USDA National Institute of Food and Agriculture, [insert project type, e.g. Hatch/Evans-Allen/McIntire Stennis] project [insert accession number].**

**Outcomes and accomplishments help lead to products and/or a project impact.**

An outcome/accomplishment is defined as a significant change in knowledge, action, or condition.

*Examples of such phrases are: "Increase in the numbers of acres that..." or "Decrease in the number of children that..." or "Increased profits from the sale of..."*

#### Change in Knowledge:

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.

#### Change in Action:

A change in action occurs when a significant change in behaviors or practices results from the project's activities.

#### Change in Condition:

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.