Hatch Proposal Guidelines
Virginia Agricultural Experiment Station (VAES)

Key Requirements:

- **Capacity projects (Hatch/Multistate/McIntire Stennis/ Animal Health & Disease) cannot use another federally funded project to complete the proposed work**.

  o Examples of approved funding sources include:

Start-up funds	Commercial entity	Private Funding	Foundation
Field Trial	Commodity Grant	VT Internal	Pratt Funding

  o While you *cannot* report activities directly supported by another federally-funded grant, consider activities related to, but not listed within, the federally-funded objectives.

- **Capacity projects create the opportunity to gather preliminary data for new/emerging research**.

  o Hatch projects have a 5-year duration.
  o The project should create value for your research program.
  o Consider creative ways to manage the budgetary constraints for fulfilling the Hatch project. (Undergraduate research, Commodity Board, or VT/CALS 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.**
- **IMPORTANT**:
  o Certain terms are no longer acceptable under the current administration. See Appendix B (located in the last few pages of **this document**) for details.

Reasons Hatch is important to you:

1. USDA Capacity Funds support your faculty position.
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 18 months of their start date at VT.
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, seed grant, etc.).
   See Guide on Hatch & Multistate Research Program, effective March 1, 2024, for details.

Things to know before submitting your Hatch Proposal:

- Submission is a three-phase process.
  o Phase 1: Peer review followed by departmental review.
  o Phase 2: VAES internal review
  o Phase 3: USDA NIFA review and final approval
- Hatch proposals are submitted for VAES internal review via Submittable *(internal system)*.
- **The NRS system does not reflect figures or tables correctly. Avoid including figures or tables.**
- Make certain you are following the correct guidelines for the project type you are proposing.

Technical Details

Your proposal should fall under one of the eight VT Critical Needs <u>found here</u>.

Please follow the format below (headers/sub-headers/character limits, etc.)

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

2. **Non-Technical Summary** *(maximum 9,500 characters, including spaces)*
   This is 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, taxpayers, governmental staff, and other scientists. **Please use layman's language to serve general citizens** *without* a scientific background.

   A. <u>Importance</u> *(1 Paragraph)*:
   Please consider a perspective that goes beyond the primary end-user of the science you are conducting. Briefly discuss:

   1. The current issue or problem the research will address.
   2. Why is it important to be studied now?
   3. What is the overarching goal of this project?

   B. <u>Relevance to advancing Virginia, the regions, and the United States (U.S.)</u> *(1 paragraph)*:
   Why is this topic relevant to Virginia (VA) and U.S. Agriculture? Address at least two of the following:

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

   C. <u>Approach</u> *(1 paragraph)*:
   A brief summary of the basic methods and approaches used to collect and produce data/results
   (Do not repeat detailed objectives, methods, or procedures from other sections.)

   D. <u>Goals</u>:
   Provide a clear, concise statement of the major goals for the project.
   Major goals (overarching goals) encompass a broad perspective of what purpose, service, major achievement, or milestone the project will meet.
   Following the major goals statement, please list the numbered objectives of your project.
   Objectives must be clear and measurable.

   E. <u>Target Audiences</u>:
   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.

   F. <u>Anticipated outcomes and impacts</u> *(1 paragraph)*:
   1. What are the ultimate outcomes this project hopes to achieve?
   2. What are the social benefits?

3. Technical Portion

==***NRS does not render figures or tables correctly. *Please do not include figures and tables.*==

a. Previous Work and Present Outlook:

Provide:
1. The status of the research topic of your interest by summarizing published research by others and/or your **non-proprietary** preliminary data.
2. Any additional knowledge needed/gaps that the project expects to provide.
3. ___Estimates___ of economic impact in Virginia, the region, or the U.S. (e.g., 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.)
4. Literature citations/references should be included at the end of the document.

b. Methodology *(Maximum 8,000 characters, including spaces)*:

Description should follow the order of the objectives listed above. ***For each objective***, please include:
1. Experimental design
2. Methods used
3. Potential statistical analysis method(s)

c. Potential difficulties, limitations, and alternative plans:
Please state any expected difficulties, known limitations, or potential alternative plans.

d. Outcomes and Products:

See Appendix A for details.

1. 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).

2. 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, or 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.

e. 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.

4. **Probable Duration**:
   Five years

5. **Timeline**:
   Include a timeline for the proposed activities. *(GANTT Chart Style)*

   Do not specify years or months because the date of project approval is unknown.
   Instead, reflect Year 1, Year 2, Year 3, Year 4, Year 5.

6. **Effort Contribution**:

   1. Estimated *5-year total* scientist-years (SY), professional years (PY), and technical/clerical years (TY) percent effort proposed for the effort.
   2. 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 (except volunteers), who will devote time to the project.*

   A description is as follows:

   SY = Scientist Year (Faculty time) **SY 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 three categories represented in any given proposal.

7. **Personnel**:
   Include the **Project Director (PD)** leading the proposed effort and other technical workers on the project.

8. **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.

9. **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.

10. **Internal**:
    Include 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 it helps VAES see how you anticipate supporting the project without federal funding.

    Remember, funding from another federal source is *not* allowed for capacity projects.

    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 a 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.

11. References:

Include the literature citations/references used within the proposal.

Appendix A

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 training.
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's impact.
An outcome/accomplishment is defined as a significant change in knowledge, action, or condition.
Examples of such phrases are: "Increase in the number 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 in understanding scientific knowledge. For education or extension projects, a change of knowledge occurs when recipients of an education or extension activity demonstrate significant 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 the condition of societal concern results from the project's activities. If appropriate and available, outcomes should be supported with key quantitative data, such as the number of acres impacted, increased profits, or the number of people impacted.