AGRICULTURAL RESEARCH PROGRAM

EVANS-ALLEN MANUAL











FALL 2020

College of Agriculture and Environmental Sciences North Carolina Agricultural and Technical State University

TABLE OF CONTENTS

I. Introdu	action	
A	Purpose of Manual	1
B.	Authority of the Manual	1
C.	Land Grant Mission	2
D.	Mission/Research Goals of Agricultural Research Program	2
E.	Implementation of the Agricultural Research Program	6
F.	Organizational Structure of Office of Agricultural Program	7
	Liaison with Division of Research	
H	Merit Review of Evans-Allen Proposals	7
	n Developing an Evans-Allen Research Proposal	
	Secure Initial Proposal Approval	
	Conflict of Interest	
C.	Proposal Guidelines	9
	Conduct Peer Review Process	
E.	Complete Required Forms	9
F.	Document Submission/Naming the File	10
III. Proce	ss for Approval of an Evans-Allen Proposal	
	Submission to USDA/NIFA	
	Agricultural Research Program Project Funding and Budgeting Decision-Making	
C.	Award Letter and Budget Allocation	10
IV. Forms	s Required Related to Funding	
A	Prior to Funding	11
В.	During Project Implementation and Upon Termination	12
V. Respo	onsibilities of Personnel	
A	Department Chairperson/Project Coordinator (PC)	13
В.	Principal Investigator (Scientist) (PI)	13
	Co-Principal Investigator	
D.	Research Associate	15
E.	Research Assistant	16
F.	Postdoctoral Scholar	16
G	Research Specialist	17
H	Research Technician	17
I.	Support Staff	18
J.	Other Personnel	18
K.	Evaluation of Personnel	18
VI. Projec	et Monitoring and Reporting	
	Project Monitoring and Project Plan Modification	19
	Annual Project Review and Evaluation	
	Impact Statements	20

VII. Ge	eneral Policies	
	A. Duration of a Project	21
	B. Extension of a Project	21
	C. Project Operation	
	D. Equipment Purchases	21
	E. Supplies and Expendables	22
	F. Travel	
	G. Processing of Documents	22
	H. Time and Effort Certification	
	I. Budget Revisions	22
	J. Replacement of Principal Investigator(s) Upon Resignation or Other Reasons	23
	K. Harmonization of Salary Scales	
	L. After-the-Fact Approval for Emergency Purchases	
	M. Procurement Card	
	N. University Personnel	
	O. New Hires	25
	P. Postdoctoral Scholars	25
	Q. Undergraduate/Graduate Student Pay	26
	R. Discipline and Separation	
	S. Employment Termination	
	T. Grievance	
	U. Agricultural Communications	26
	V. Publications Using Data from Evans-Allen Projects	27
	W. Manuscripts	
	ppendices	
	A. Agricultural Research Organizational Chart	
	B. NIFA Critical Issues/NCA&T Research Priorities	
	C. Declaration of No Conflict of Interest Form	
	D. Evans-Allen Proposal Development Guidelines	
	E. Notice of Intent to Submit an Evans-Allen Proposal	
	F. Evans-Allen Proposal Department Chair Attestation Form	
	G. Evans-Allen Proposal Reviewers' Instructions/ Proposal Peer Review Form	
	H. Checklist for Proposal Review by Department Chair/Project Coordinator	
	I. Agricultural Research Program Student Employment Policies	
	J. Post-Doctoral Support Eligibility and Request Form	
	K. Annual Project Review	
	L. Internal Forms (AG-01 through AG-07)	
	M. Impact Statements	
	N. Procurement Card Purchases	
	O. CAES Equipment Request Form	
	P. Office of Contracts and Grants Equipment Acquisition and Management	
	Q. Equipment Pre-Acquisition Authorization	
	R. Purchase of Gasoline, Lubricants and Other Fuels	
	S. Policy for Motor Vehicle Purchases	
	T. Request for Extension	
	U. Abbreviations Used in this Manual	76

V.	Supplemental Document for Project Initiation	77
W.	Logic Model Template	78

I. INTRODUCTION

The Agricultural Research Program (ARP) is administered by the National Institute for Food and Agriculture, (NIFA) –formerly Cooperative State Research, Education, and Extension Service – of the United States Department of Agriculture (USDA) and managed by North Carolina A&T State University (NCA&TSU) through the College of Agriculture and Environmental Sciences (CAES).

A. Purpose of Manual

The purpose of this manual is to provide guidelines for the management of the Agricultural Research Program supported by Evans-Allen funds. This manual is designed to be a reference source for Department Chair/ project coordinators (PCs), principal investigators (PIs), supervisors/managers, research associates, research assistants, technicians and other personnel involved in conducting research supported by Evans-Allen funds.

This manual is updated periodically to reflect changes in University and College of Agriculture and Environmental Sciences research administration policies. The manual will be revised in accordance with changes made by state or federal actions affecting the administration of Evans-Allen funds.

<u>Objectives:</u> The objectives of this reference manual are the following:

- 1. To increase understanding of the policies and procedures of the Agricultural Research Program.
- 2. To assist Department Chair/project coordinators and principal investigators with applying the program guidelines as they relate to the administration of their research projects and related activities.
- 3. To promote uniformity of application of policies and practices by faculty and staff of the Agricultural Research Program.

B. Authority of the Manual

The policies contained herein have been approved and endorsed by the chancellor of the University and are regarded as the official University policy pertaining to the management of Evans-Allen funds for research in the College of Agriculture and Environmental Sciences. The manual is designed to be consistent with the policies and procedures affecting the employment, retention, and dismissal of faculty as set forth in the various policy and procedural manuals governing University employees. The policies and procedures included in this manual became effective October 1, 1982 and have been revised March 1985, May 1991, March 2003, January 2010, January 2011, January 2013, September 2016, 2019, and July 2020.

The Agricultural Research Program came into being after Congress passed P.L. 95-113, the "Farm Bill" in 1977. Evans-Allen funds were appropriated in Section 1445 of that legislation which provided permanent funds for the conduct of research in the food and agricultural sciences at the 1890 Institutions, Tuskegee University, and West Virginia University. The Cooperative State Research, Education, and Extension Service, (CSREES), since renamed the National Institute for Food and Agriculture or NIFA, a division of the United States Department of Agriculture, was designated to administer these funds.

The legislation further established that each eligible institution designates a chief administrative officer of the Agricultural Research Program (a research director) to be appointed by the president/chancellor of the institution. The research director is responsible for administering the program in accordance with USDA guidelines and the agricultural research objectives of the respective institution. For details of program management, see the following website:

http://nifa.usda.gov/program/agricultural-research-1890-land-grant-institutions

The research director has the primary responsibility for determining the need, priority, and scientific feasibility of the projects proposed. To accomplish this, the research director is responsible for developing a procedure, subject to USDA/NIFA approval, for project documentation, merit review, and selection. This procedure will assure that the research project proposals are scientifically sound, relevant to society's agricultural and food needs, and not duplicative of efforts undertaken elsewhere.

Eligibility for funding is contingent on an institution having an approved set of projects consistent with the guidelines set by Section 1445. Funding for projects must be approved by USDA. Funding is allocated annually on a federal fiscal year basis.

C. Land Grant Mission

As a land-grant university, North Carolina Agricultural and Technical State University uses its academic skills and resources to improve the sustainability and welfare of individuals, families, communities and businesses involved with North Carolina agriculture. The College of Agriculture and Environmental Sciences was established to achieve this mission through three primary functions: (1) academic instruction, (2) Cooperative Extension; and (3) research. Each of these functions represents a major commitment on the part of the University to modernize the agricultural workforce, improve the efficiency and productivity of farm operations, and provide solutions to agriculture problems.

D. Mission/Goals of the Agricultural Research Program

The mission of the Agricultural Research Program in the College of Agriculture and Environmental Sciences involves the following: (1) to identify, seek solutions and have impact on current and emerging agricultural issues at the local, state, national and international levels, including the improvement of agricultural methods and products and

the improvement of the lives and communities, especially of rural under-served and under-represented groups; (2) to provide experiential learning opportunities for graduate and undergraduate students in the food, agricultural and environmental sciences; and (3) to articulate the meaning of science and technology in agriculture.

Goals

The Agricultural Research Program (ARP) has three major goals that guide its decisions concerning selection of funded activities and utilization of resources.

Goal 1: Find solutions for current and emerging agricultural issues.

Four Research Priorities (Cluster Areas) – The ARP in tandem with NIFA and CAES has identified four critical issues/research priorities that are focusing our faculty expertise and other resources on finding practical and effective solutions to agricultural issues and concerns:

1. Improving Plant and Animal Agricultural Systems

There is a critical need to increase agricultural food, fiber, and fuel productivity and to increase the profitability of both large scale and small-scale farms and agribusinesses while providing safe and nutritious food for a growing population and being good stewards of our natural resources. Plant system programs address plant production, protection, the development of new plant varieties and plant products, organic farming, landscaping, gardening, and discovering and disseminating solutions to production issues including weeds, pests and diseases. Animal system programs focus on developing and disseminating knowledge and methods for animal breeding, reproduction, nutrition, genetics and genomics, physiology, environmental stress, product quality, health, wellbeing and biosecurity.

2. Protecting Environmental and Natural Resources

There is a critical need to proactively and comprehensively promote environmental stewardship and to protect the natural environment through conservation and sustainable agriculture and timber production and to subsequently address the critical issues impacting the quality of our soil, water, and air. Our work includes providing scientific solutions for animal waste management, wastewater treatment, composting, nutrient management, septic systems, wetland management, soil properties, and fishery and pond management. Programs support the expansion of production systems for biofuels and bio-based products including non-petroleum-based fuels, power sources, and chemicals. We also provide extensive support for three of the state's top five industries: forestry, wood products and tourism.

3. Enriching Youth, Family & Community Well-Being

There is a critical need for youth to develop skills necessary for future success. Our work provides opportunities for youth to participate in 4-H clubs, camps, school enrichment, afterschool and special interest programs. There is also a critical need to address the challenges affecting consumer and family well-being. Our research and outreach focus on areas such as parenting, child care, family relationships, financial resource management, aging, healthy homes, and disaster readiness, response, and recovery. Finally, critical issues facing

communities include quality of life and economic, social and environmental resiliency. Our programs focus on leadership, workforce development, entrepreneurship, civic engagement, volunteerism, community planning, and disaster preparedness.

4. Enhancing Food Safety, Nutrition and Health

There is a critical need to ensure we have a safe and nutritious food supply. Our efforts help protect the safety of the food supply through research and extension efforts focused on all levels along the food supply chain, from production to consumption. To meet the growing need for healthy food, our work includes development and production of new food products that promote health and prevent disease. There is also a critical need to ensure that individuals, families, and communities have the knowledge to make choices about selecting nutritious food and living healthy lifestyles that reduce their risk of chronic disease and that they have access to safe, high-quality food at reasonable prices.

Goal 2: Develop capacity to effectively address current and emerging agricultural issues.

To effectively address current and emerging agricultural issues, the Agricultural Research Program primarily uses its resources to support the development of any of the six program initiative areas identified in Goal 1. This is accomplished through providing faculty developmental support and resources, and by supporting the development of beginning researchers through mentoring by department chairs or other senior faculty. The ARP supports individual faculty, departmental and CAES program development by directing the use of Evans-Allen funding to develop lines of research and "track records" of publishing and measurable scientific and practical impact. Through this approach, the ARP uses Evans-Allen funds to not only implement a research program that addresses agricultural issues, but also one that increases the capacity to continue and expand promising research initiatives. Evans-Allen funds are expected to be used for seed and development projects leading to successful funding from sources other than Evans-Allen funds.

Faculty are encouraged and expected to seek other non-Evans-Allen funds to support their research, e.g. CBG, AFRI, NIH, NSF, DOE, DOD, Homeland Security, USAID, Department of Education, Stimulus (ARRA), etc.). Funding of new projects is based on:

- Evans-Allen's budgeted allotment
- Project's ability to addressing CAES research priorities and USDA-NIFA critical issues through an interdisciplinary approach,
- Resources requested for project, and
- Project's proposed impact

<u>Collaboration</u> – Comprehensive and sustainable solutions to current and emerging agricultural issues can be achieved through collaborative relationships and partnerships. Faculty members are expected to collaborate with colleagues in their department, with faculty in other CAES departments and with colleagues across campus. In addition, research projects should involve the participation of staff from Cooperative Extension. Finally, partnerships with industry and agencies are essential for assuring application and use of completed research, so involvement with these entities is strongly encouraged.

<u>Interdisciplinary Research</u> – Evans Allen funding will assist CAES researchers in developing innovative interdisciplinary research which have strong potential at present and in future to get external funding from governmental agencies, industries, foundations, and others funding sources. Addressing CAES research priorities and USDA- NIFA critical issues through interdisciplinary approach.

According to the definition used by the National Academies, **interdisciplinary research** is defined as "research that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice".

An example would be a water quality engineer working with food processing scientist to manage the waste water from food processing.

High priority will be given to interdisciplinary projects that bring together expertise of faculties across different disciplines to integratively solve problems. Researchers should work with faculties from two or more disciplines/departments in the CAES including Cooperative Extension to be considered for interdisciplinary research.

<u>Goal 3: Develop expertise and promote interest in current and emerging agricultural issues</u> among faculty, staff, and students.

The ARP offers faculty development opportunities through on-going training and opportunities to improve research skills and expertise. Faculty research forums are held to promulgate interest among faculty, staff and students in current and emerging agricultural issues. These activities and opportunities also are designed to provide experiential learning opportunities for graduate and undergraduate students in the food, agricultural and environmental sciences. All ARP funded projects include paid or volunteer opportunities for students to be involved as research assistants.

USDA identifies problem areas for research on a national basis. The six national priority areas are listed below. These priorities are organized into programs based on the needs of the nation. The six priorities are:

- (1) Global Food Security and Hunger—NIFA supports new science to boost U.S. agricultural production, improve global capacity to meet the growing food demand, and foster innovation in fighting hunger by addressing food security for vulnerable populations.
- (2) Climate Variability and Change—NIFA -funded projects generate knowledge to develop an agricultural system that maintains high productivity in the face of climate changes. This will help producers plan for and make decisions to adapt to changing environments and sustain economic vitality, as well as take advantage of emerging economic opportunities offered by climate change mitigation technologies.
- (3) Water—NIFA funded projects supports sound water and watershed management

practices, such as modern conservation technologies, appropriate crop choices, drought preparedness, and can help farmers to enhance water use efficiency, conserve water resources, and maximize production while minimizing environmental degradation.

- (4) Sustainable Energy—NIFA contributes to the President's goal of energy independence with a portfolio of grant programs to develop biomass use for biofuels, designing optimum forestry and crops for bioenergy production, and to produce value-added bio-based industrial products.
- (5) Childhood Obesity Prevention—NIFA -supported programs ensure that nutritious foods are affordable and available, and provide guidance so that individuals and families are able to make informed, science-based decisions about their health and well-being.
- (6) *Food Safety*—NIFA food safety programs work to reduce the incidence of foodborne illness and provide a safer food supply by addressing and eliminating causes of microbial resistance to contaminants, educating consumer and food safety professionals, and developing food processing technologies to improve safety.

NC A&T State University has four state- related initiatives to align with USDA-NIFA's priorities. (Appendix B).

E. Implementation of the Agricultural Research Program

The research director for Evans-Allen funds at North Carolina A&T State University is the dean of the College of Agriculture and Environmental Sciences. The dean is assisted with the administrative responsibilities of the program by the (CAES) associate dean for research. The Agricultural Research Program is administered through the Office of Agricultural Research.

The chairperson of a given department is the Department Chair/project coordinator (PC) for all research conducted in that department. Individual faculty serve as the principal investigators (PIs and co-PIs) of the research conducted under the program. PIs have the responsibility of supervising no more than two projects, and monitoring all fiscal and program aspects of the same. Specific responsibilities for all project personnel appears in the section entitled "Responsibilities of Personnel."

Annually, the Office of Agricultural Research submits a Plan of Work to USDA/NIFA. This plan of work lists the projects that the Agricultural Research Program plans to fund during the coming year. For funds to be allocated to a project, the project proposal must be reviewed and approved by USDA/NIFA. After receiving written approval for a specific proposal, the University is permitted to allocate resources to the project. *It should be noted that not all projects approved by NIFA are funded.* Allocation of funds is done at the discretion of the associate dean for research and the research director.

F. Organizational Structure of Office of Agricultural Research (see Appendix A)

Figure 1 shows the organizational structure of the Office of Agricultural Research. Staff members assist in the management of the Agricultural Research Program in the following areas: location of funding sources, editing and reviewing proposals, handling monetary issues and fiscal management, office management, and general assistance with all phases of the research proposal writing process.

G. Liaison with Division of Research Administration

The Office of Agricultural Research and the Division of Research and Economic Development (DORED) work closely to locate appropriate funding sources, to seek partnerships on and off campus, to assure proper budgeting procedures, to provide grant writing training and support, and to seek adequate resources for research at the University and in the College of Agriculture and Environmental Sciences.

H. Merit Review of Evans-Allen Proposals

Each participating Evans-Allen institution is responsible for conducting a merit review of sponsored projects. These reviews cover the following:

- Ensure completeness of project proposal (all items in Appendix D should be included).
- Evaluate relevance of the proposed research.
- Evaluate quality and scientific value of the proposed research.
- Consider opportunities for cooperation with other individuals or units.
- Provide opportunity for the project leader to interact with reviewers and make adjustments as appropriate.
- Provide USDA/NIFA with an indication, project by project, that the process was followed.

II. STEPS IN DEVELOPING AN EVANS-ALLEN RESEARCH PROPOSAL

In order for a proposal to be accepted and forwarded for consideration for approval by USDA/NIFA, the applying researcher (PI) or team of researchers must complete the following:

A. Secure Initial Proposal Approval

A faculty member interested in submitting a research proposal should do the following:

Consult with the department head and the Associate Dean for Research to determine
if the project falls within the scope and objectives of the Agricultural Research
Program of the College of Agriculture and Environmental Sciences.

- Identify the existing or needed human and physical resources for the implementation of the project.
- Determine that the proposed project can be successfully completed with the financial and other resources available.
- Principal Investigators planning to submit a new project proposal must submit a Notice of Intent by February 1 (Appendix E). If PI has a current Evans-Allen projects must list and document efforts to seek funding from other agencies.
- New proposals <u>must focus on a NIFA Critical Issue/CAES Research Cluster</u> (Priority) area.

B. Conflict of Interest

In accordance with University policy* and the requirements of external funding agencies, ** researchers are required to disclose and report potential conflicts of interest and/or conflicts of commitment prior to the submission of research proposals. Conflicts of interest occur when financial or other personal considerations compromise or create the appearance of compromising a researcher's objectivity in the execution, dissemination, or application of findings of a research project. Conflicts of commitment occur when the pursuit of external activities involves an inordinate investment of time or is conducted in such a manner as to interfere with the employee's fulfillment of university responsibilities.

All researchers are required to fully disclose all suspected or known conflicts of interest to their supervisor, consistent with the University policies referenced below. Grant funding include both capacity funds (e.g. USDA Evans Allen) and competitive USDA funds covered by NIFA policy on COI** as well as grants from all other funding sources. Researchers are required to fill a COI disclosure form covering all the investigators as part of the project proposal approval process. Certain activities that might represent a conflict of interest may be permissible with full disclosure, administrative approval, and ongoing oversight to ensure the potential conflict of interest does not result in personal or financial gain for the researcher.

^{*} Conflict of Interest and/or Commitment in Research[https://hub.ncat.edu/administration/legal/policies/sec5-res-econ-dev/conflict-of-interest-and-commitment-in-research.pdf] and Conflict of Interest/Conflict of Commitment Policy
[https://hub.ncat.edu/administration/legal/policies/sec3-human-resources/2019sept30final_conflict-of-interest-and-commitment-policy.pdf].

^{**}NIFA Policy Guide https://nifa.usda.gov/sites/default/files/resource/NIFA-18-016-NIFA-Federal-Assistance-Policy-Guide.pdf

C. Proposal Guidelines

A written proposal needs to address all proposal submission guidelines required for Evans-Allen funded projects. A proposal is not to exceed 20 pages (excluding logic model and references) using a 12-point Times Roman, Arial or similar font formatted for standard letter-sized paper with one inch margins and 1.5-line spacing. Budget Narrative needs to be submitted as a separate document while submitting a proposal. A listing of the required sections and information pertaining to what needs to be addressed in each section can be found in Appendix D.

D. Conduct Peer Review Process

Before submitting a completed proposal to NIFA, the proposal must be reviewed using the following procedure:

- Department Chair should review the proposal and send it to Associate Dean for Research. In the event that the department chair is included in the proposal, another department chair will serve as a reviewer.
- The proposal must be reviewed by at least three external reviewers. The associate dean for research will select external reviewers from outside CAES and the university from a listing of knowledgeable scientists. The principal investigator may recommend reviewers to the associate dean for research.
- The reviewer must complete the review using review form. A sample of the review form appears in Appendix G. The review panel will combine their assessments and prepare a report for the respective PI.
- The Dean of CAES and Associate Dean for Research will utilize the review panel assessment to determine the proposals to advance for NIFA review.

If the particular proposal is recommended for advancement to NIFA, the principal investigator must respond to all substantive review comments and provide a revised proposal to the associate dean for research. This version will be sent to NIFA for review and approval

E. Complete Required Forms

- USDA/NIFA Forms. Samples of all forms required for proper submission of Evans-Allen proposals will be provided on the College of Agriculture and Environmental Sciences website at:
 - https://www.ncat.edu/caes/agricultural-research/research-resources/index.php
- Institutional Review Forms. Separate forms from the campus Division of Research that may be necessary to complete are forms dealing with human subjects, animal research, or recombinant DNA. These forms must be

<u>submitted to the Division of Research and reviewed before the proposals can be</u> sent to NIFA for project approval.

• Internal Forms (AG-01 through AG-06). An internal set of forms must be completed and accompany the proposal when submitted to the Office of Agricultural Research. These forms ensure that resources requested are available and approved for use in the study. Forms are available in Appendix L and will be provided on the CAES website at:

https://www.ncat.edu/caes/agricultural-research/research-resources/evans-allen.php

• The proposal should be accompanied with Department Chair Attestation form (Appendix F). This form and the proposal must be submitted to Associate Dean of Research by the department chair by the due date [PI is responsible to submit the proposal and form to the department chair by the due date provided by Ag Research Program].

F. Document Submission/ Naming the Files

To maintain the consistency in file name, all the related files or documents should be named with your last name followed by year and name of documents. For example- Last Name_ Year_ Evans-Allen Proposal, Last Name_Year_NOI, Last Name_Year_ Evans-Allen Report, Last Name_Year_ Evans-Allen Internal Form, Last Name_Year_COI.

III. PROCESS FOR APPROVAL OF EVANS-ALLEN PROPOSAL

A. Submission to USDA/NIFA

After review and approval through the Office of Agricultural Research, the proposal is sent to USDA/NIFA for approval. NIFA approval is based on the scientific merit and the agricultural aspects; the budget is not reviewed by USDA/NIFA. *It should be noted that approval of the project from NIFA does not mean that the project will be funded at the University*. Decisions on local funding and the level of funding are made at the University. The proposal title must be added to the annual Plan of Work submitted by the Office of Agricultural Research to NIFA.

B. Agricultural Research Program Project Funding and Budgeting Decision-Making After notification that a project is approved by USDA/NIFA, an internal budget process is conducted to determine allocation of approved funds. The decision for funding and the level of funding for the amount of requested funding of a particular project is based on availability of funds and is a joint decision of the department chair, the research director and the associate dean for research.

C. Award Letter and Budget Allocation

The principal investigator and the department chairperson are notified by letter by the associate dean for research of acceptance of a proposal and the project dates. Principal investigators of approved projects are expected to respond within 30 days

of notification of their award that they accept the terms of the funding and will proceed to implement their project by the start date identified in the notification of award letter. In some instances, a revised scope of work may be required if funding is not sufficient to meet the original project objectives.

IV. FORMS REQUIRED RELATED TO FUNDING

A. Prior to Funding

In Spring 2013, the CRIS Forms website used by NIFA to perform project initiations, and reporting was closed. In its place NIFA instituted REEports – an all-in-one portal for managing project information. REEport is NIFA's new grant and formula project initiation and reporting system, building on and replacing the CRIS web forms system. It implements the Research Performance Progress Report (RPPR), a standard progress report format that all Federal research agencies are required to use for research grant reporting. REEport evolved from the recommendations that were made in the One Solution initiative business case. A user manual fully explaining the process can be found at: https://nifa.usda.gov/resource/reeport-guide-project-directors.

Consistent with past practices, in order for a proposal to be submitted to NIFA for approval, the following items must be included apart from the reviewed proposal (Appendix V):

- Title (82 characters or less) the title is a succinct characterization of the focus and subject of study being performed. Do not include phrases such as "research on," "investigation of," etc. Do not use quotation marks or underscoring. Keep in mind that the title will be used for information retrieval searches, so including specific keywords that are as descriptive of the project as possible is important.
- Performing Organization/Institution the organization that employs the scientist(s) conducting the research.
- Performing Department the entity/section at the Performing Organization/Institution to which the principal investigator/project director is assigned and performs most of his/her duties and research.
- Start/End Dates projects are generally funded for no more than three years, commencing on the first day of the federal fiscal year and ending on the last day of the fiscal year.
- Project Participants estimated FTEs of all project participants (scientists, professional support, graduate students, technical support, undergraduate students, administrative and other).
- Goals (8000 characters with spaces) a clear, concise statement of the project's objectives.
- Products/Outputs (8000 characters with spaces) these activities can be events, services or products that reach people, including conferences, workshops, field days, counseling, tutoring, surveys, publications, media products, etc.
- Outcomes/Accomplishments (8000 characters with spaces) defined as a

- significant change in knowledge, action, or condition.
- Audiences (8000 characters with spaces) include individuals, groups, market segments, or communities that will be served by the project.
- Methods (8000 characters with spaces) 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.
- Non-Technical Summary (8000 characters with spaces) sum up the importance of the research project in terms that general citizens can understand.
- Keywords
- Classification projects entered in REEport must be classified according to standard classification elements which consist of a series of three classification areas as outlined in the NIFA classification manual located here: https://nifa.usda.gov/sites/default/files/resource/MANUAL%20OF%20CLASSIFICATIO N.pdf.
- Assurance Statement Institutions receiving NIFA funding for research are responsible for protecting human subjects, and providing humane treatment of animals.

Internal Processing Forms

An internal set of forms must be completed and accompany the proposal when submitted to the Office of Agricultural Research. The purpose of the forms is to assure that University resources are available as requested on the project. All required signatures must be obtained before the forms are submitted.

The Internal Processing forms include:

- AG-01 Collaboration with Cooperative Extension and Others
- AG-02 Intent to Use A&T Farm Land, Facilities, Livestock, Personnel
- AG-03 Involvement of Human Subjects
- AG-04 Intent to Use Laboratory and Equipment
- AG-05 Personnel Requirements
- AG-06 Communication Items
- AG-07 Appropriateness of Budget to Objectives/Available Funds [completed by budget manager]

Forms are available in the Appendix L and will be provided on the College of Agriculture and Environmental Sciences website at: https://www.ncat.edu/caes/agricultural-research/research-resources/index.php

B. During Project Implementation and Upon Termination

<u>Project progress reports</u>. Once a project has been approved and funded, the principal investigator is required to submit (electronically) an annual progress report via REEport. This report is submitted annually during the life of a project. This report must be scientific in nature and <u>must include output activities, impacts/outcomes, any published articles, relevant participants, target audiences, products and project modification.</u> The report is due in the Office of Agricultural Research at the end of the calendar year. This report is required regardless of the type of grant from USDA.

<u>Project termination reports</u>. A termination report is required at the conclusion of all projects. Termination reports are to be completed within 90 days of the project's termination.

Progress/termination reports are to be reviewed and approved by the project coordinator (department chairperson) prior to submission to the Office of Agricultural Research. The information from these reports is entered into the USDA/NIFA technical database, which is available for on-line searching.

V. RESPONSIBILITIES OF PERSONNEL

A. <u>Department Chairperson/Project Coordinator (PC)</u>

A department chairperson's role is one of leadership, guidance and coordination of all research in the department. The head of a department should be familiar with the objectives of a research project, monitor project staffing, and be involved in the evaluation of achievement of those objectives. These responsibilities include:

- 1. Approval of submission of proposals by departmental faculty and staff for funding through the Evans-Allen program.
- 2. Review and approval of project expenditures for purchases, travel and other goods or services.
- 3. Recommendation for approval or disapproval in the hiring of project personnel in accordance with University personnel policies.
- 4. Approval of emergency expenditures on behalf of the principal investigator.
- 5. Participation in performance evaluation of all departmental A&T faculty and staff.
- 6. Assurance of correct and timely submission of all research administrative documents.
- 7. Participation in the evaluation of achievement of project objectives.
- 8. Evaluation of annual progress reports to ensure they meet acceptable standards.

B. Principal Investigator (Scientist) (PI)

The principal investigator should be a full-time faculty member or a Research Scientist in a CAES unit and hold a terminal degree or equivalent, and preferably should be an experienced researcher. Some combination of training and experience is acceptable.

A research scientist, an EHRA [Exempt from State Human Resources Act] position, must hold a doctoral degree with an acceptable combination of post degree training and work experience and a demonstrated record of research achievement.

The principal investigator (PI):

- 1. Coordinates the research project with the department chair/project coordinator.
- 2. Consults with the department chair/project coordinator to identify:
 - a. Space required for conducting the research.
 - b. Technicians and other personnel to be recruited for the project.
 - c. Necessary support services.
 - d. Existing equipment, if any, that can be shared or used for the project.
 - e. Other goods and services that may be required for the project.
- 3. Initiates the expenditure of approved funds.
- 4. Maintains up-to-date knowledge of the budget.
- 5. Ensures that funds are spent within the allotted timeframe and for approved purchases only.
- 6. Develops and implements changes as needed in project operations to facilitate progress of the research program.
- 7. Meets all reporting requirements of the Office of Agricultural Research, University administration and USDA/NIFA.
- 8. Maintains a current inventory of all equipment.
- 9. Uses project funds in accordance with state and federal "Use of Funds" regulations.
- 10. Follows state contractual arrangements in making purchases.
- 11. Promotes the research project and the University through:
 - o Presentations at conferences and meetings of local, regional, national and international scientific organizations.
 - Publishing of scientific articles and papers, individually or co-authored in refereed scientific journals or recognized trade publications and in the research publications of the Office of Agricultural Research.
 - Assisting in motivating students associated with the project to develop scientific careers in agriculture and food areas.
- 12. Ensures that all project personnel have the necessary human subjects/animal

use certifications.

- 13. Provides documentation for an annual review of the research study.
- 14. Ensures all project personnel receive an annual performance review.

C. <u>Co-Principal Investigator</u>

A co-principal investigator should hold a terminal degree or equivalent and should preferably be an apprenticed researcher.

A Co-principal investigator (Co-PI):

- 1. Works cooperatively with the PI to implement the research project objectives and activities.
- 2. Provides leadership on specific tasks or goals critical to completion of the project.
- 3. Provides supervision to designated staff and students involved in the project.
- 4. Performs the duties and functions of the PI when the PI is not able to do so.

D. Research Associate

A research associate, an EHRA [Exempt from State Human Resources Act] position, must hold a master's or terminal degree. Other requirements include an acceptable combination of training and experience and sufficient research capability in the particular field. Appointment may be full or part-time with a concurrent faculty appointment. The period of employment is limited to the time period of the current Evans-Allen project.

The research associate:

- 1. Reports directly to the principal investigator or designated co-principal investigators and is responsible for completing project work as assigned by the supervising PI or Co-PI.
- 2. Is responsible for the day-to-day management of the research project and for establishing and maintaining an accurate reporting system as directed by the principal investigator.
- 3. Independently supports, develops, designs, or executes moderately complex research activities for a single or multiple research projects.
- 4. May participate in writing grant proposals or the facilitation of the grant writing process
- 5. Participates in formulating research methods and suggests options for improving quality and recommending solutions;
- 6. Contributes to publications, reports and draft manuscripts; may co-present results with PI at meetings and/or conferences;

- 7. Works independently to collect data and analyzes research results;
- 8. May be responsible for the operation of a specialized laboratory or research area within a department and/or project;
- 9. Carries out any other duties relating to the planned implementation of the project he/she may be asked to perform from time to time by the principal investigator or co-principal investigators.

E. Research Assistant

A research assistant, an EHRA [Exempt from State Human Resources Act] position, must hold a master's degree in his/her discipline area and may be an outstanding doctoral student who is teaching as a part of his/her apprenticeship. The period of employment is limited to the time period of the current Evans-Allen project.

A research assistant:

- 1. Reports to the principal investigator or his/her designee.
- 2. Performs project related tasks and activities as directed by the PI or Co-PI.
- 3. Independently supports, develops, designs, or executes fundamental research activities for a single or multiple research project(s);
- 4. May participate in formulating research methods and suggesting options for improving quality and recommending solutions;
- 5. Contributes to research publications, reports and draft manuscripts;
- 6. Works independently on collection of data and analyzes research results for certain aspects of a research project(s); and
- 7. Carries out any other duties relating to the planned implementation of the project he/she may be asked to perform from time to time by the principal investigator or co-principal investigators.

F. Post-Doctoral Scholar

The University's policy on Postdoctoral Scholars state the following:

Postdoctoral Scholar ("Postdoc") is a professional apprenticeship designed to provide recent Ph.D. recipients with an opportunity to develop further the research skills acquired in their doctoral programs or to learn new research techniques, in preparation for an academic or research career. North Carolina A&T State University embraces the principle of the National Academies' Committee on Science, Engineering, and Public Policy (COSEPUP) that "the postdoctoral experience is first and foremost an apprenticeship whose purpose is to gain scientific, technical, and professional skills that advance the professional career of the postdoc." In the process of further developing their own research skills, it is expected that Postdoctoral Scholars will also play a significant

role in the performance of research at the University and augment the role of graduate faculty in providing research instruction to graduate students.

A postdoctoral scholar, an EHRA [Exempt from State Human Resources Act] works under the supervision of the PI who serves as a mentor for the scholar. Additional information related to the Postdoctoral Scholar is available at https://hub.ncat.edu/administration/human-resources/staffing-services/post-doc.php

G. Research Specialist

A research specialist, a SHRA [subject to state human resources act] position, must hold a bachelor's degree in a discipline related to the research area. The period of employment is limited to the time period of the current Evans-Allen project. The range of duties includes, but is not limited to: project planning, experimental design, developing methodology, conducting procedures, modifying procedures as needed, data collection and analysis, laboratory management, project management, preparing publications and reports, and communication and instruction.

A research specialist:

- 1. May plan, develop, conduct and evaluate scientific research in a laboratory, clinic, field and/or teaching environment (hereafter referred to as "laboratory").
- 2. Understands the context and implications of the research in order to apply and interpret theoretical knowledge necessary to conduct research in one or more scientific disciplines.
- 3. Demonstrates and models effective mental concentration, visual attention and manipulative skills. Work may include the training and supervision of staff, students and others in performing specific techniques or phases of experiments.
- 4. Carries out any other duties relating to the planned implementation of the project he/she may be asked to perform from time to time by the principal investigator or co-principal investigators.

H. Research Technician

A research technician, a SHRA [subject to state human resources act] position, must hold a high school diploma and directly related experience required to perform the assigned duties. The period of employment is limited to the time period of the current Evans-Allen project. The range of duties includes, but is not limited to: conducting experiments, collecting and summarizing data, and providing proper laboratory/study subject care.

A research technician:

- 1. Supports experimental processes in a laboratory, clinic, field and /or teaching environment (hereafter referred to as "laboratory").
- 2. Requires knowledge of applicable laboratory procedures, tests, techniques and terminology.
- 3. Carries out any other duties relating to the planned implementation of

the project he/she may be asked to perform from time to time by the principal investigator or co- principal investigators.

I. Support Staff

This position, a SHRA [subject to state human resources act] position, requires clerical and computer skills and involves a considerable amount of public contact ranging from students and faculty to off-campus visitors. A graduate of a two-year college with a major in secretarial science and experience that will ensure a high level of performance in the duties and responsibilities described below, is preferred.

Administrative Support:

- 1. Reports directly to the project coordinator (department chair) or his/her designee.
- 2. Handles correspondence related to research projects filing and routing mail.
- 3. Assists with the paperwork associated with the administration of the research project and other documentation (purchase/travel requisitions, payroll authorizations).
- 4. Maintains a working knowledge of research, academic and University policies.
- 5. Assists with monitoring the funding levels and procedures related to project implementation.
- 6. Handles student payroll information and assists with student supervision as directed by the department chairperson.

J. Other Personnel

This category includes individuals who are responsible for supporting the day-to-day operations of the laboratories or farm. This includes undergraduate students.

These individuals:

- 1. Report to the supervisor designated by the principal investigator.
- 2. Performs project related tasks and activities as directed by his/her project supervisor.

K. Evaluation of Personnel

Consistent with university policies, all personnel should be reviewed annually. **An annual performance evaluation is required for all EHRA and SHRA employees.** The evaluation must be in writing, must be given to and signed by the evaluated employee, and each evaluated employee must have an opportunity to provide a written response to the evaluation. Any response will be attached to the evaluation and considered a part of the evaluation. Appropriate forms may be located on the Division of Human Resources website: https://hub.ncat.edu/administration/human-resources/forms/index.php

VI. PROJECT MONITORING AND REPORTING

A. Project Monitoring and Project Plan Modification

The department chair/project coordinator is responsible for monitoring the implementation, administration, and operation of a project in accordance with the plan presented in the project proposal. If a project's plan requires significant modification such as a change in objectives or an exclusion of an objective, this action needs to be approved by the project coordinator and communicated to the Office of Agricultural Research for approval. Major changes in budget allocations and changes in personnel also must be approved by the project coordinator and reported in a timely manner to the Office of Agricultural Research. The principal investigator with the project coordinator's review is responsible for submitting an annual achievement to the ARP.

B. Annual Project Review and Evaluation

All funded Evans-Allen projects are to be reviewed annually to determine achievement of goals and objectives. These reviews are to be conducted at the end of the Federal Fiscal year to provide an assessment of progress or if a project is ending, as a termination review.

The purpose of these reviews is to determine if the project has been implemented, administered, and operated in accordance with the plan presented in the project proposal. The review also covers evaluation of reported achievements and impacts and other aspects of the study including barriers to successful completion. The ultimate goal of the review process is to strengthen the research program, provide an opportunity for professional growth, and to provide support to the researchers.

Each PI completes a form that appears in Appendix K. The completed form is submitted to the department chair/project coordinator. The REEport form can be substituted, but must summarize efforts to secure new funding (if applicable).

The following list includes key points to be addressed in the Annual Project Review report:

- Progress on each stated objective including reasons for non-implementation of specific objectives.
- Project conclusions (or preliminary results if project ongoing).
- Impact of project activities, findings, outcomes.
- Dissemination efforts of project activities, findings, outcomes.
- Listing of collaboration activities who, what was involved, what was achieved.
- Efforts to secure new funding (if applicable).
- Student mentoring and research experience describe what students have had the opportunity to learn and do as a result of their participation in the project.

- Capacity building describe any impact the project has had in terms of the
 department, college, or University being in an improved position to attract funding
 and other resources, as well as any impacts in terms of improving the ability to
 train faculty and students in techniques and skills in demand by the field, and/or
 impacts that the project has had in terms of securing equipment or other resources
 to conduct research or technical applications on issues affecting the agricultural
 community.
- Administration of project—including fiscal management, personnel management, timely submission of reports, and other aspects of management.

Progress and project termination reviews are to be made based on completion of the Annual Project Review Report Form and other applicable material (e.g., reports, presentations, manuscripts) provided by the principal investigator. The completed report form and other applicable materials are to be reviewed by the department chair/project coordinator, who is responsible for ensuring that the progress/termination review material is accurate and complete. The project coordinator will meet with each PI after reviewing the submitted form and materials. After review by the project coordinator, the form and any additional supporting materials are submitted to the associate dean for research for ARP review.

Within 60 days of receipt of the ARP Progress/Termination Report Form and any other applicable material, the associate dean for research is expected to complete an independent review of a project's annual/termination report and convene a review meeting with the principal investigator, project coordinator (department chair), and other involved project participants, such as co-principal investigators (if appropriate), to discuss the project and any concerns identified in the review by the project coordinator and the associate dean for research. The result of this meeting is that one of four recommendations will be made: (1) Commendation for satisfactory project achievement/completion, (2) Support for continuation of funding, (3) Review of unsatisfactory performance, or (4) Project termination (for projects not already ending or terminated). Copies of a written report detailing the recommendation are transmitted within two weeks of the review meeting to the principal investigator and the project coordinator by the associate dean for research. The written report contains the recommendation as well as a list of strengths and areas needing improvement.

C. Impact Statement

Each project is required to provide a statement of impact identifying the beneficial effect the project's implementation has had on the field of agriculture, the university, CAES and/or agencies, companies, or individuals. The impact statement provides a brief synopsis of the measurable and meaningful contribution the project has made since its inception. The statement is to be based on actual accomplishments not intended goals or objectives. Annually in mid-January the progress or termination report should be accompanied with the impact statement. The general outline for an Impact Statement is provided in Appendix M.

VII. GENERAL POLICIES

A. Duration of a Project

Normally, the average period approved for a project is three years. Continuation funding is reviewed annually and is dependent upon satisfactory progress. The dean/research director has the authority to redirect, extend or terminate a project when it is evident that satisfactory progress is not being made.

B. Extension of a Project

Application for the extension of a project beyond the approved period is to be sent to the dean/research director by February 1st of the scheduled termination year. Any application for extension must have an up-to-date progress report and a justification for the extension prepared by the principal investigator. It should also have the support of the department chair/project coordinator and outline in detail the anticipated expenditures and the activities to be undertaken during the period of the requested extension. Extension requests must be completed using the format in Appendix T.

While project extensions are not encouraged, a project may be extended (automatic extension) for one year or less beyond the termination date, subject to approval of the dean/research director. Additional extensions must be approved by USDA/NIFA after proper justification.

C. Project Operations

No expenditures should be incurred until the principal investigator receives a certified/or temporary budget from the Office of Agricultural Research. All purchases, payroll authorizations and other acquisitions must be completed within the established regulations of the University and those of the state of North Carolina.

To expedite the purchase of livestock at auctions, refer to Statement for Purchase of Live Animals for Research (https://hub.ncat.edu/administration/business-and-finance/procurement-services/policies/res-animals.php) of the Business and Finance Purchasing Policies and Procedures.

D. Equipment Purchases

Prior to submitting a proposal, the principal investigator should identify equipment needed for successfully conducting the proposed study, and confer with the department chair/project coordinator and the associate dean for research. Every proposal that includes equipment acquisition must include a completed CAES Equipment Request Form (Appendix O). Accordingly, the budget accompanying the proposal should contain a list and the cost of such equipment. All equipment authorized for purchase in a given fiscal year must be requested between October 1 and June 30 of the current federal fiscal year. Funds allocated for equipment not purchased during this period may be diverted to other projects or program uses.

Additionally, the Office of Contracts and Grants has instituted guidelines for equipment acquisition. Equipment is defined as non-expendable, tangible, personal property having a useful life of more than one year and an acquisition cost of \$5,000 or greater. This

threshold is consistent with the definition of equipment referenced in OMB circulars A-21 and A-110, University Accounting Procedures, and UNC-GA. For contracts and grants awarded prior to July 1, 1996 the threshold for equipment was \$500 or more. For detailed information on the process, see Appendix P.

E. Supplies and Expendables

Except for feed, repairs, gasoline and other fuels, supplies and other expendables should be purchased by <u>August 31 of the current fiscal year</u>. Any adjustments due to price or invoice changes must be approved by the department chair/project coordinator and the Office of Agricultural Research.

In regards to the purchase of certain fuels, see Appendix R.

F. Travel

Travel should be undertaken in accordance with North Carolina A&T State University's <u>Travel Policies and Procedures</u>. The travel authorization should be completed though Chrome River. TVL-1 documents must have an agenda attached. Vehicle requests should be made at least two weeks in advance.

Only State employees are authorized to drive state vehicles. Undergraduate students are not permitted to drive state vehicles. Special attention should be paid to the guidelines for use of motor vehicles purchased by Evans-Allen Funds (Appendix S).

G. Processing of Documents

All payroll documents, purchase requests and other documents of procurement and services are to be approved by the department chairperson prior to submission to the Office of Agricultural Research. Monthly cut-off dates established by the Office of Agricultural Research are to be observed in the processing of documents. Allow three working days for processing of project related documentation in the Office of Agricultural Research. The budget manager will forward all such documents to the dean/research director's office for approval. The dean's office will forward them to Business and Finance for further processing.

H. Time and Effort Certification (ECRT)

Time and Effort Certification is completed electronically for all persons employed or otherwise supported by Evans-Allen funds. Employees will receive an effort certification email and should click the Effort Certification link to login. It is recommended you use Mozilla Firefox or Google Chrome to launch the application. Additional instructions for completing the certification is available at DORED. Failure to comply with certification in the ECRT® system by the date stated in the notification will result in a hold on funds. This hold will be placed on the account the next business day. With the exception of payments for students, all other expenditures (salaries, travel, equipment, materials and supplies) will be suspended until the certification is completed.

I. Budget Revisions

Budget revisions may be requested as necessary. However, it is suggested that this be kept to a minimum (maximum of three per year) for ease of recording in the Office of Agricultural Research and that of Contracts and Grants. All revisions are subject to the

approval of the Associate Dean for Research.

J. Replacement of Principal Investigator(s) Upon Resignation or Other Reasons
If for any reason a principal investigator or other project personnel leaves the project
(e.g., resignation or other), the associate dean in consultation with the department chair/
project coordinator and the dean/research director will decide whether or not the
individual should be replaced. The University property management office must conduct
a complete inventory of project physical resources (equipment) before the individual is
allowed to terminate his/her connection with either the project or the University.

In accordance with the Personnel Policies for Designated Employment Exempt from the State Human Resources Act North Carolina A&T State University (1981), EHRA non-teaching employees in covered positions shall be subject to the same provisions concerning sick leave, maternity leave, civil leave and military leave as are applicable to employees subject to the State Human Resources Act found in the Division of Human Resources Policies and Procedures.

K. Harmonization of Salary Scales

The salary for an individual to be employed under the State Human Resources Act (SHRA) is determined by the University personnel director, whereas the salary for an individual to be employed in a position that is exempt from the personnel act (EHRA) is determined by the CAES research administrators. In doing so, every effort should be made to harmonize salaries with qualifications and experience across projects and in keeping with University guidelines. No principal investigator should offer a salary to any prospective employee on his/her project unless approved by the department chairperson, associate dean for research and research director/dean.

L. After-the-Fact Approval for Emergency Purchases
Principal investigators are advised to become familiar with Statement for Emergency
Request Section on Purchasing in the Business and Finance Purchasing Policies and
Procedures Manual. The procedures as outlined in the manual for emergency purchases
should be followed according to the guidelines at
https://hub.ncat.edu/administration/business-and-finance/procurement-services/policies/emerg-purch.php

M. Procurement Card (PCard)/Petty Cash

Use of petty cash is highly irregular in the Office of Agricultural Research due to the introduction of the procurement card program. The purpose of the petty cash fund is to facilitate project operation and alleviate the burden placed on principal investigators to purchase small, urgently needed items from personal funds. The following criteria for petty cash expenditures have been established: \$100.00 ceiling on purchases. Purchases must not violate state purchasing policies and procedures.

Purchases must be of an emergency nature and/or for small items that do not lend themselves to the university's purchase order system, small tools, chemicals, seeds and other such items to be used in research. No equipment will be purchased with petty cash. An appropriate explanation/justification must accompany each request. (Space provided on form). The fund must be operated at all times in compliance with the

university's fiscal policy, in addition to the following. Individual purchase cannot exceed \$100.00.

Only original receipts will be honored. No fines or fees resulting from the violation of any laws, statues, or regulations are allowed. A petty cash request form must be approved by the associate dean for research and dean/research director before funds can be disbursed. Petty cash settlement forms must have receipts or other proof of purchase documentation attached in a neat manner.

The procurement card program has been established by the State of North Carolina to allow rapid purchase of low dollar goods, reducing paperwork and handling costs associated with the small purchase process. The A&T procurement card is essentially a standard credit card in which the liability rests with the University instead of the individual cardholder. (This is different from the American Express Corporate travel card, in which the liability is solely the cardholder's.) The procurement card is issued to an employee, empowering this person to purchase goods and services on behalf of the University. Under no circumstance may this card be used for personal purchases.

The procurement card operates the same as a purchase request but with more restrictions. PCard purchase requests (Appendix N) must be submitted and approved by the fiscal unit in the Office of Agricultural Research prior to any purchase. (No equipment, travel related expenses, personal memberships, etc.) All expenditures must be within the allotted budget limits. (Funds must be in place before expenditures are made). Use of the card should be limited to items listed in the guidelines contained at: https://hub.ncat.edu/administration/business-and-finance/procurement-services/policies/index.php

N. University Personnel

North Carolina A&T State University is deeply committed to a policy of equal employment opportunity for all of its employees and applicants. The University actively seeks and employs qualified persons in all job categories and administers all personnel actions affecting employees without regard to race, color, religion, gender, sexual orientation, age, national origin, physical or mental disability, or status as a disabled or veteran of the United States Armed Forces.

The principle of the equal employment opportunity applies to all aspects of the employment relationship, including:

- Initial consideration for employment,
- Job placement and assignment of responsibilities,
- Evaluation of performance,
- Promotion and advancement.
- Compensation and fringe benefits,
- Access to training and other professional development opportunities,
- Formulation and application of personnel rules and regulations,
- Access to facilities and services,
- · Layoff and recall from layoff, and
- Discipline and termination.

The University's Affirmative Action policy also reaffirms the commitment to nondiscrimination in the employment of the disabled, Vietnam-era veterans, and disabled veterans. Questions or concerns about equal employment or affirmative action should be addressed to the Division of Human Resources, or the Affirmative Action Office, or visit these websites: https://www.ncat.edu/about/hr/index.php

O. New Hires

When the principal investigator identifies the need for a new hire (scientist, professional, technical and/or assistants), he/she should meet and discuss these personnel needs with the department chairperson. The Office of Agricultural Research should then be contacted with a request to fill the position and to verify that there is funding for the position. The period of employment is limited to the time period of the current Evans- Allen project.

To hire employees subject to the State Human Resources Act (SHRA), the University employment procedures must be adhered to and must comply with the University guidelines and Senate Bill 886. The recruitment and selection of SHRA and EHRA employees is completed through the PeopleAdmin electronic system https://www.ncat.edu/about/hr/index.php. All applications are completed using the online process in PeopleAdmin at https://www.ncat.edu/about/jobs/index.php. For more detailed information on the SHRA employment procedures, visit: https://www.ncat.edu/about/hr/index.php

To finalize the hiring process for EHRA positions, payroll documents (EHRA internal payroll authorizations with supporting documents) must be completed. Details related to completing a new hire packet are located at https://www.ncat.edu/about/hr/index.php. For SHRA positions, the E-1 must be completed and is located on the Division of Human Resources website at https://hub.ncat.edu/administration/human-resources/forms/index.php.

The payroll documents are to be signed by the principal investigator and department chairperson and forwarded to the Office of Agricultural Research. The Office of Agricultural Research will forward the payroll documents to the dean's office. Once approved by the Dean, the payroll documents will be forwarded to the respective University offices. No individual should report for work prior to official notification from the Division of Human Resources for SHRA employees or from the Dean's or Provost's Office for EHRA employees.

P. Postdoctoral Scholars

The employment of post docs on all Evans-Allen project is allowable however; PIs must submit a Post-Doctoral request form (Appendix J) to the Associate Dean for Research via Department Chair for approval. The period of employment is limited to the time of the current Evans-Allen project. The form should clearly describe the following:

- Period of Employment
- Justification for the position

- Duties and Responsibilities
- A Mentoring Plan to include development goals for the scholar during the postdoctoral period, activities to accomplish the goals, and plans for evaluating progress.

Employment past the specified period is dependent on funds available from projects **other than Evans-Allen** and approval by the department chairperson and the Associate Dean for Research. Any deviation from this policy will be handled on an individual basis. University policies regarding postdoctoral scholars are available at: https://hub.ncat.edu/administration/human-resources/staffing-services/post-doc.php

Q. Undergraduate/Graduate Student Pay

Freshman and sophomore undergraduates on Evans-Allen projects are hired at an hourly rate of \$8. Junior and senior undergraduates are hired at an hourly rate of \$10. Undergraduate Research Scholars are hired at an hourly rate of \$12. All undergraduates are limited to working no more than 15 hours per week except those working on the farm; these students may work up to 20 hours per week. Graduate students are hired at an hourly rate of \$15 and can work no more than 20 hours per week.

Graduate students, as of Fall 2015 are paid up to \$8000 per semester. There can be no exceptions! If not enrolled in the University during summer months, a 40-hour work week is permitted. For more detailed information, see the ARP Student Employment Policies in Appendix I. Depending on the availability of funds, budgets may include support for up to two graduate and two undergraduate students (including Undergraduate Research Scholars). Note: Depending on the availability of funds, projects may support up to two undergraduate students and up to two master's students on their approved budgets.

R. Discipline and Separation

It is the intent of North Carolina A&T State University to provide for its employees and management a fair, clear and useful tool for correcting and improving performance problems, as well as to provide a process to assist management in handling cases of unacceptable personal conduct. For more detailed information on the SHRA Disciplinary Action Policy and the EHRA Separation Process, visit the University websites at: https://www.ncat.edu/about/hr/index.php

S. Employment Termination

Upon notice of termination of employment, the individual should follow the guidelines as set forth in the Faculty Handbook and at https://www.ncat.edu/about/hr/index.php

T. Grievance

The normal procedure as outlined according to University regulations will be followed.

U. Agricultural Communications

Agricultural Communications employs a variety of media techniques and strategies to help staff in the Agricultural Research Program and the Cooperative Extension Program communicate with diverse audiences. The unit offers services in writing, editing, photography, design, videography and Web-based technologies. Agricultural Communications can assist with creating all types of printed materials, the production and creation of audio and video materials and using the Web for education, information and promotion. The unit is available to assist with media training and using the media to communicate messages. The unit also offers communications training customers to help them become more proficient at using modern communication tools.

The communications unit produces a wide variety of media materials designed to help college personnel do a better job. The unit can assist scientists and researchers in packaging project results for use by the general public, and in making sure that stakeholders are aware of research and extension work and see the work is relevant to solving some of the state's problems and issues. Effective communications require a careful blending of subject matter, knowledge and media skills. The unit's major goal is effective communications among media staff, principal investigators and subject matter Extension specialists. Another goal is to produce high quality materials and deliver them on time. Only high quality materials are likely to attract the attention of research and Extension offices and to deliver messages with desired impact. For communications assistance, call the Office of Agricultural Communications at 285-4712. Specific guidelines on procedures for production of research publications and other materials are included in Appendix L—Form AG-06. Please complete a communications project planner if your proposed project will include any print or electronic communication media as part of its deliverables, including such things as video, curriculum, fact sheets, brochures, new web content, photography, etc.

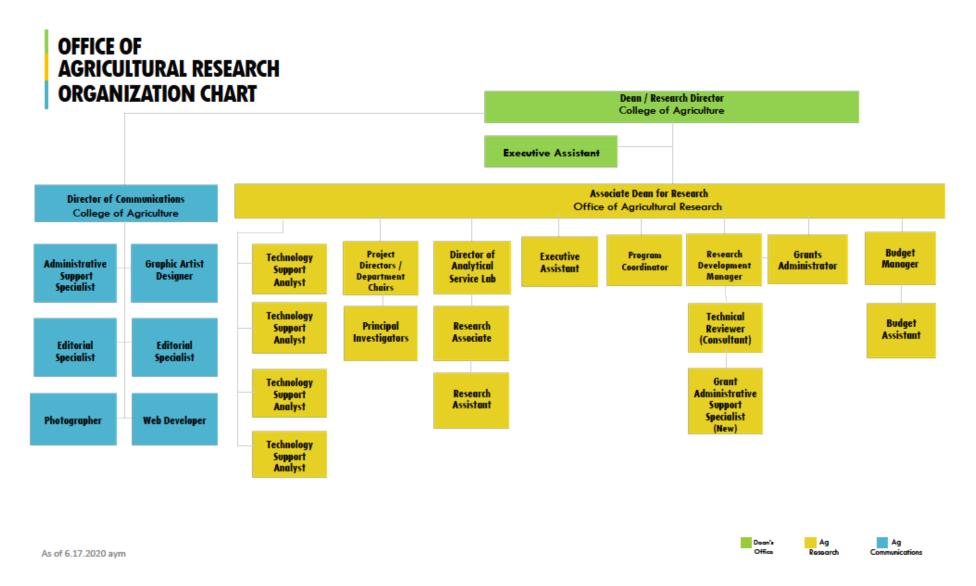
V. Publications Using Data from Evans-Allen Projects The Agricultural Research Program will arrange payment for page charges and related expenses for manuscripts published in research journals.

W. Manuscripts

Manuscripts should contain the following acknowledgement:

<u>Acknowledgement</u>: The research in this paper was funded through the National Institute for Food and Agriculture of the United States Department of Agriculture, Project No. NCX-XXX-, in the Agricultural Research Program, North Carolina Agricultural and Technical State University.

Appendix A



Appendix B

NIFA CRITICAL ISSUES – NCA&T RESEARCH PRIORITIES

Beginning in 2019, CAES is placing a strong emphasis on supporting research projects that address one of the following "Cluster" areas. These Clusters align with NIFA 2020's Critical Issues and Science Emphasis Areas.

5. Improving Plant and Animal Agricultural Systems

There is a critical need to increase agricultural food, fiber, and fuel productivity and to increase the profitability of both large scale and small-scale farms and agribusinesses while providing safe and nutritious food for a growing population and being good stewards of our natural resources. Plant system programs address plant production, protection, the development of new plant varieties and plant products, organic farming, landscaping, gardening, and discovering and disseminating solutions to production issues including weeds, pests and diseases. Animal system programs focus on developing and disseminating knowledge and methods for animal breeding, reproduction, nutrition, genetics and genomics, physiology, environmental stress, product quality, health, wellbeing and biosecurity.

6. Protecting Environmental and Natural Resources

There is a critical need to proactively and comprehensively promote environmental stewardship and to protect the natural environment through conservation and sustainable agriculture and timber production and to subsequently address the critical issues impacting the quality of our soil, water, and air. Our work includes providing scientific solutions for animal waste management, wastewater treatment, composting, nutrient management, septic systems, wetland management, soil properties, and fishery and pond management. Programs support the expansion of production systems for biofuels and bio-based products including non-petroleum-based fuels, power sources, and chemicals. We also provide extensive support for three of the state's top five industries: forestry, wood products and tourism.

7. Enriching Youth, Family & Community Well-Being

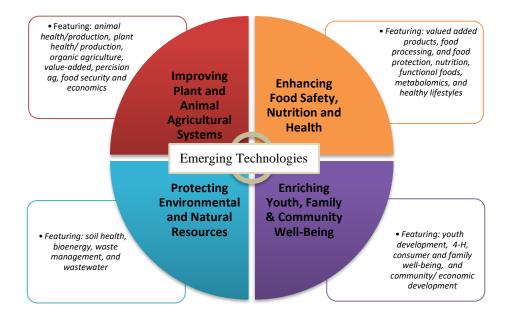
There is a critical need for youth to develop skills necessary for future success. Our work provides opportunities for youth to participate in 4-H clubs, camps, school enrichment, afterschool and special interest programs. There is also a critical need to address the challenges affecting consumer and family well-being. Our research and outreach focus on areas such as parenting, child care, family relationships, financial resource management, aging, healthy homes, and disaster readiness, response, and recovery. Finally, critical issues facing communities include quality of life and economic, social and environmental resiliency. Our programs focus on leadership, workforce development, entrepreneurship, civic engagement, volunteerism, community planning, and disaster preparedness.

8. Enhancing Food Safety, Nutrition and Health

There is a critical need to ensure we have a safe and nutritious food supply. Our efforts help protect the safety of the food supply through research and extension efforts focused on all levels along the food supply chain, from production to consumption. To meet the growing need for healthy food, our work includes development and production of new food products that promote health and prevent disease. There is also a critical need to ensure that individuals, families, and communities have the knowledge

to make choices about selecting nutritious food and living healthy lifestyles that reduce their risk of chronic disease and that they have access to safe, high-quality food at reasonable prices.

Principal investigators (PIs) are encouraged to consider cross-cutting areas such as big data, microbiome, and genomics, and nanotechnologies as they relate to these cluster areas.



Appendix C

Declaration of Conflict of Interest Form Evans Allen/NIFA Research Applications

Please complete this form to declare there is <u>no</u> potential Conflict of Interest (financial or personal) involving you or any member* of your research team regarding the conduct of this proposed research project.

All researchers are required to fully disclose all suspected or known conflicts of interest to their supervisor. Certain activities that might represent a conflict of interest may be permissible with full disclosure, administrative approval, and ongoing oversight to ensure the potential conflict of interest does not result in personal or financial gain.

If you are uncertain regarding a relationship that might represent a Conflict of Interest please consult this manual, the University's Conflict of Interest and/or Commitment in Research Administrative Policy [https://hub.ncat.edu/administration/legal/policies/sec5-res-econ-dev/conflict-of-interest-and-commitment-in-research.pdf], the University General Conflict of Interest/Conflict of Commitment Policy [https://hub.ncat.edu/administration/legal/policies/sec3-human-resources/2019sept30final_conflict-of-interest-and-commitment-policy.pdf], or the NIFA Policy Guide (p.111 re: COI) https://nifa.usda.gov/sites/default/files/resource/NIFA-18-016-NIFA-Federal-Assistance-Policy-Guide.pdf.

If you believe you or a member of your research team may have a Conflict of Interest, discuss the potential conflict with your supervisor <u>before</u> submitting the proposal. <u>A known Conflict of Interest must be addressed prior to submission of a proposal.</u>

As the lead Principal Investigator for this project, you are responsible for **certifying that there are no financial or personal Conflicts of Interest (COI) involving you and your research team members** regarding this research project. List below the names of all research team members (including Collaborators and Stakeholders) who will receive payment from this project funding.

Principal Investigator (Name)	Signature	Date	
As the Lead Principal Investigator on defined by the above polices.	this project, I certify that no	one of the above names have	a COI as
7	8		
5	6		
3.	4		
1	2		

^{*}Any individual with direct responsibilities or the development, implementation, analysis, or dissemination of a product or information from this project are considered members of the research team.

Appendix D

Evans-Allen Proposal Development Guidelines

The following addresses the sections that are required for completion of an Evans-Allen proposal application. A proposal is not to exceed 20 pages (excluding logic model and references) using a 12-point Times Roman font formatted for standard letter-sized paper with one-inch margins and 1.5-line spacing. The following is the recommended template for preparing an Evans-Allen proposal application

Title & Summary

The title used by itself should communicate the objectives and scope of the project. The title may not exceed 82 characters (spaces included). Following the title present a brief, clear, specific summation of the subject of the project.

1. Connection to CAES Research Clusters

Describe how the proposed project connects with the selected initiative.

2. Connection to PI's Previous Work and Present Outlook

Describe how the proposed project connects to previous work conducted by the PI, co-PIs, and/or other CAES researchers and how it will build upon the previous work.

3. Scientific Approach and Literature Review

Present a review and discussion of the literature that establishes the need for the project. Include a rationale/justification for the project; indicate why the project is distinct or different from other work in the literature. Discuss how the research fills a gap or need in the knowledge base. The review also should support the approach that will be followed to address the project's aims and objectives.

4. Research Aim(s)/Questions and Objectives

Present the research aims, questions, objectives, and/or hypotheses that will be addressed through experimental or non-experimental comparison, by assay, or other analyses.

5. Interdisciplinary Approach

Describe how the project is interdisciplinary (refer the definition of interdisciplinary research given in Evans-Allen Manual). Make a case for needing an interdisciplinary team to address the focus area of the project. Describe how the different disciplines represented on the project will contribute to achieving the aims, objectives and expected outcomes.

6. Research Methodology

Provide a clear description of the research design and/or a plan for how the aims of the study will be achieved. Include a description of: (1) how the sample will be selected including the size of the sample, (2) data collection methods and procedures, and (3) how the data will be analyzed. Also,

indicate if the project includes a pilot development stage. (Include plans to obtain Human Subjects Approval or Approval for Animal Research.)

7. Project Plan

Include a timetable that provides reasonable time frame for achieving each objective and the major tasks of each objective. Note in the timetable time points associated with the completion of objectives and tasks essential to the achievement of the project.

<u>Description of Specific Activities/Tasks to be Performed</u>. Include a brief description of the activities to be performed that are task and/or objective specific. For example, if the individual will be involved with specific laboratory analyses relating to nutrients and plant growth list those analyses and identify the role the individual will have in doing them such as performing them, reviewing or monitoring them, interpreting results, applying results to later stages of the project, and so on.

<u>Description of How the Task(s)</u> Relate to the Objective. Include a brief description of the connection of the tasks or activities to the objective. The description should make it clear why the task or activity is essential to the objective or overall project. Using the above example, the specific analyses to be conducted are necessary to determine which combination of nutrients will be selected for the plant growth experiments.

<u>Essential Tasks and/or Project Objectives</u>. Include a brief description relating how the individual's expertise/experience qualifies him or her for the roles and responsibilities identified in the project's implementation plan. Using the plant growth experiment example, indicating that the scientist has expertise in plant growth and development, with special reference to the role of nutrients in growth and development would be appropriate.

Note: As a suggestion for organizing personnel in involvement, descriptions consider using the list of tasks by objectives included in the study's timetable. This would provide a schematic of tasks/objectives by personnel. It also could serve as a central organizing piece for presenting the project's plan of implementation. As an alternative, the approach below provides a simple rubric for providing the requested information.

8. Implementation Capacity

Indicate the status of the availability of all essential instrumentation, equipment, personnel, and other support needed to successfully implement the project. Identify the roles and responsibilities of all essential personnel and partners on the project. (*Complete forms AG-04 – Intent to Use Laboratory and Equipment and the CAES Equipment Request Form – if applicable*).

Include a key project personnel table to identify key project members, connections to CAES, project roles and responsibilities and the specific expertise the individual bring to the project.

<u>Facility Resources</u> Insert narrative starting here... Identify all facilities - buildings, labs, farm acreage, etc. required for project work. (*Complete forms AG 02-Intent to Use A&T Farm Land, Facilities, Livestock, Personnel & AG 05- Personnel Requirements – if applicable*).

9. Involvement of Scientists/Stakeholders Outside CAES

Describe the specific contributions on the project expected from scientists and/or others not identified as co-PIs or from within the College of Agriculture and Environmental Sciences. Note any project involvement or connection with the U.S. Department of Agriculture.

10. Expected Outcome (Impact)

Present a description of the project's expected outcomes. Be sure to indicate the current condition/situation and the changes that will occur as a result (potential/expected IMPACT) of your research. Identify the likely beneficiaries of the findings of the project and describe how the expected outcomes will be translated for use by stakeholders (See Appendix M).

11. Involvement of Students

Provide details of specific student roles and responsibilities. Include student-learning outcomes which indicate how the student will benefit.

12. Connection to Cooperative Extension

Describe the specific contributions of N.C. A&T or other Cooperative Extension personnel identified either as co-PIs, collaborators, or consultants on the project. PIs must obtain the approval of the Extension Administrator. (Complete form AG 01- Collaboration with Cooperative Extension and Others.)

13. Budget and Budget Narrative

Include explanations of all budgeted items and amounts relating to the project goals and objectives.

Estimate annual allotments to salaries (percent of effort), supplies, travel, printing and binding (publication costs), equipment, maintenance, and other operating expenses. A budget narrative template is available on the Agricultural Research webpage (https://www.ncat.edu/caes/agricultural-research/research-resources/evans-allen.php) to complete this component of the proposal. The budget narrative should ensure the items requested support the proposal goals and objectives and contribute to completion of the procedures described in the proposal. Budget Narrative needs to be submitted as a separate document while submitting a proposal.

Note: Teaching faculty and Extension staff cannot exceed 25% effort for all Evans-Allen projects during the academic year. Research faculty and research scientists may not release more than 50% of their time to teach. Summer salary for nine-month faculty capped at two months.

Logic Model (optional)

Include a Logic Model that conforms to the model outline provided by NIFA (Appendix W). Logic model should not exceed one page limit.

NOTE: Project Modifications

If there is need to make a substantive change in the objectives of a project, a new or revised project outline must be prepared and submitted. A major change in procedure might also necessitate a revision of the project outline.

Appendix E

NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY COLLEGE OF AGRICULTURE AND ENVIRONMENTAL SCIENCES

Notice of Intent to Submit Evans-Allen Proposal



NOTE: This form is to be completed by CAES faculty planning to submit an Evans-Allen proposal for funding consideration. Complete and return form to the ADR by the due date provided by Office of Agricultural Research.

submit a proposal for funding consideration in FY'20					
Principal Investigator(s):					
Project Title:					
Type of Proposal: Single PI □ Multiple Co-PI □ Multi-Level Collaborative □ Research Cluster Area Being Investigated: □ Improving Plant and Animal Agricultural Systems □ Protecting Environmental and Natural Resources □ Enriching Youth, Family and Community Well-Being □ Enhancing Food Safety, Nutrition, Health Primary Aim of the Project: (Provide a two-three sentence statement regarding the overall aim of the proposed project.)					
			Allen funding. Attach supporting documents s still under review, etc.) that reflect efforts to		
National Science	USDA		USDA – Capacity		
Foundation	USDA – SA	RE	USDA – SERD		
USDA – AFRI	_		_		
☐ Homeland Security	Department	of Defense	☐ Department of Energy		
			Others		
Chair's Name and Department	Signature	Date			
Chair's Name and Department	Signature	Date			
Chair's Name and Department	Signature	Date			

NOTE: If more than one department is involved each chair should sign this form. (Revised 7.30.2020)

Appendix F

NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY COLLEGE OF AGRICULTURE AND ENVIRONMENTAL SCIENCES



Evans-Allen Proposal

DEPARTMENT CHAIR ATTESTATION

Project Title:					
Principal Investigat	Principal Investigator(s) and Department(s):				
Type of Proposal:	Single PI □	Multiple Co-PI □	Multi-Level Collaborative □		
2. Is supported by li3. Includes a sound4. Includes the nece	and Animal Agriculonmental and Natural, Family and Common Safety, Nutrition a ect listed above more of the Collegaterature or other evand reasonable plants and expertise and	ultural Systems ral Resources nunity Well-Being nd Health ge's Research Cluster Arridence regarding justific	ation for it y conduct the project		
6. Has potential for	producing meaning	gful impact in the field of	f agricultural science.		
Chair's Name (Type	d) and Department				
Signature	Da	nte			

Appendix G Evans-Allen Proposal Reviewers' Instructions/ Proposal Peer Review Form

Note to Reviewers

The purpose of your review is to provide the Research Director of the College of Agriculture and Environmental Sciences (CAES) assistance with making a judgment about the appropriateness and quality of the attached proposal for receiving Evans Allen funding. This funding is intended to provide research scholars initial and/or continuing funds to support a research study or program that addresses one of the College's four <u>Research Clusters</u> and represents a potential contribution to agricultural science or related disciplines.

As a reviewer you are being asked to provide your honest professional assessment of the proposal on a range of evaluation attributes including its scholarship, potential for measurable impact, advancement of knowledge related to agricultural science, and practicality of being successfully completed by the identified research team, identified resources (equipment and expertise beyond the research team), and time frame.

Please complete the attached form by reading each evaluation statement and assigning a point rating representing your estimation of completeness that the material in the proposal addresses each of the identified proposal component categories. Note that all items except 2, 9, and 13 may receive a maximum point value of 4; all other items may receive a maximum point value of 8.

We ask that you provide comments indicating some basis for your rating to assist with the selection of the most promising research ideas. We will share your comments (anonymized) with the PI(s) combined with comments of other reviewers as feedback and suggestions for revision or other changes.

Ratings of the proposal and comments on its quality and merit are very important. You represent a significant peer to the PI(s) and your knowledge of the field and research experience can provide exceptional guidance regarding the merits of the proposal. Please know that the content of your evaluation will be taken very seriously and will play a large part in determining if the proposal should be considered for funding. Your time and participation in this review process is greatly appreciated.

Click **HERE** or on the link below to complete your review.

https://www.ncat.edu/caes/agricultural-research/research-resources/evans-allen.php

Evans-Allen Proposal Review Form

Pro	oject Title:			
Pri	ncipal Investigato	r(s) and Departme	ent(s):	
Ту	pe of Proposal:	Single PI □	Multiple Co-PI □	Multi-Level Collaborative □
CC	ONNECTION TO	CAES RESEAL	RCH CLUSTERS	
1.	The proposal des identified research		question or issue that has	s relevance or importance to the
	/8 Rating			
Co	mments:			
CC	ONNECTION TO	PREVIOUS W	ORK BY THE PI(S)	
2.	the PI, co PIs, and	d/or other CAES 1		ld upon previous work conducted by it include a description regarding or a research study?
	/8 Rating			
Co	mments:			
SC	CIENTIFIC APPI	ROACH & LITE	CRATURE REVIEW	
3.		rovides support fo		ture that establishes the need for the be followed to address the aims and
	/8 Rating			
Co	mments:			
RE	ESEARCH AIM(S), QUESTIONS	AND OBJECTIVES	
4.	The proposal inc	-	e description of the resea	arch aim(s), questions, and objectives
	/8 Rating			
Co	mmente:			

INTERDISCIPLINARY APPROACH

5.	The proposal describes a clear integration of information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines that advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice.
	/8 Rating
Co	omments:
RI	ESEARCH METHODOLOGY
1.	The proposal provides a clear description of the data sample, data collection methods and procedures that will be followed, and how the data will be analyzed.
	/8 Rating
Co	omments:
Ρŀ	ROJECT PLAN
2.	The proposal includes a description of the major tasks and activities that will need to be completed in order to achieve the aim(s) of the project. This includes a timetable that presents a reasonable time frame for achieving each objective and the major tasks of each objective.
	/8 Rating
Co	omments:
IN	IPLEMENTATION CAPACITY
3.	The proposal includes an adequate description of all the essential instrumentation, equipment, project personnel (including roles and responsibilities), and other support that is needed for the successful implementation of the project.
	/8 Rating
Co	omments:
IN	VOLVEMENT OF SCIENTISTS/STAKEHOLDERS OUTSIDE OF CAES
4.	The proposal identifies and describes specific contributions on the project expected from scientists and/or others not identified as co-PIs or from within the College of Agriculture and Environmental Sciences. /8 Rating
C_{α}	amments:

EXPECTED OUTCOMES/IMPACT

field of agricultural sciences.

5.	The proposal provides a clear description of the outcomes the PI(s) expect(s) the project to achieve.
	/8 Rating
Co	mments:
6.	The proposal includes a clear description of the likely beneficiaries of the findings of the project and how the findings will be shared with the stakeholders of the research project.
	/8 Rating
Co	mments:
IN	VOLVEMENT OF STUDENTS
7.	The proposal identifies and describes specific student research activities, research skill instruction that students will receive, and support of students pursing Master's or Doctoral degrees.
	/8 Rating
Co	mments:
CO	ONNECTION TO COOPERATIVE EXTENSION
8.	The proposal identifies and describes specific contributions of NCA&T or other Cooperative Extension personnel identified either as co-PIs, collaborators, or consultants on the project.
	/4 Rating
Co	mments:
RA	ATING TOTAL:
	MMARY OF NEEDED REVISIONS (List changes/improvements you believe should be ade before the proposal is "acceptable" for funding support)
	THER COMMENTS (Include notes relating to any issues that you feel should be taken into a nsideration regarding the feasibility and likelihood of the proposed project contributing to the

(4.1.2020)

Appendix H Checklist for Proposal Review by Department Chair/Project Coordinator

AREA	COMMENTS
General	
• Does the proposed research fit within the scope of the PI's research program?	
• Does cost exist in the proposal that is not reimbursable from Evans-Allen Funds?	
 Is the principal investigator familiar with and have credentials related to the scientific field 	
• Is the project interdisciplinary in nature?	
What impact will this proposal have on future teaching loads in the department and how	
 Are there tangible indicators of successful research results in the proposal? 	
 How long after a project is initiated should results be available? 	
• Is there a conflict with state and federal regulations on the part of the principal investigator in conducting the research?	
• Is the purpose or objective of the research proposal consistent with overall objectives of the department?	
If animals are involved with the research project, does the care and handling of such animals comply with State and Federal Regulations?	
• If human subjects are involved, has approval been obtained from the University "Human Subjects Committee"?	
• Is the proposal within the policy guidelines of the University?	
AREA	COMMENTS
Personnel	
• Does the project require NEW personnel, including a post-doc?	
• Does the project involve another institution? Has contact been made?	

• Does the project involve Extension and has the PI discussed this with the Extension Administrator?	
• Are students going to be employed in this project? Indicate type of student, percentage of time/effort and salary per hour.	
Has the principal investigator completed all necessary reports (funding and progress) related to previous or current projects?	
• Are the personnel salaries in harmony with those of other research and University personnel salaries?	
 Can personnel from other projects be utilized for this project? 	
Scientific Equipment	
• Can existing scientific equipment be used for this project? Is the new piece of equipment community property? Where will the equipment be housed?	
Facilities/Space Requirements	
• Does the proposed research require additional space?	
 Describe in detail the physical space requirement. 	
• Is this space presently available for use? If so, where is it located?	
 Are renovations of any type needed for the space required? If so, describe in detail the estimated cost and anticipated source of funds for these renovations. 	
AREA	COMMENTS
Services and Supplies If the project requires special services and furniture and office equipment that normally are not available, describe and list the estimated cost for each item.	

Personnel

 List by title all other grants, contracts, or projects in which the principal investigator, technician, secretary, and support labor are presently participating. State the percentage of time/effort of each individual devoted to each project.

(ADD EXTRA SHEET AS NEEDED)

Project Name: Project
Grant No: Funding:
% of Time/Effort:

Project Name: Project
Grant No: Funding:
% of Time/Effort:

Project Name: Project
Grant No: Funding:
% of Time/Effort:

Project Name: Project
Grant No: Funding:
% of Time/Effort:

Appendix I Agricultural Research Program Student Employment Policies (Undergraduate and Graduate)

OVERVIEW

To enhance the learning experience, the Agricultural Research Program provides employment opportunities for undergraduate and graduate students on various research projects. Student employees can make valuable contributions by performing services/tasks that might not be economically feasible in hiring a full-time employee. But it must always be emphasized that a student employee should be a student first and employee second! In an effort to provide uniformity in student employment practices across CAES research activities, the following guidelines have been developed.

DEFINITION

Only full-time students (graduate or undergraduate) can be approved for employment on a research project. An undergraduate student is defined as one enrolled in undergraduate study for a minimum of twelve credit hours during each of the fall and spring semesters. Graduate students must be enrolled with a minimum of nine credit hours for each of the fall/spring semesters. Please see the student handbook for detail.

https://www.ncat.edu/about/hr/student-employment/index.php

GPA ELIGIBILITY

In all cases students must be in good academic standing in their respective departments. Undergraduates must maintain a minimum 2.75 on a 4-point scale while graduates must have a 3.0 on a 4.0-point scale. A student who does not meet these minimum GPA requirements cannot be employed on any CAES research activity; no exceptions.

If a student (graduate or undergraduate) enrolls as a full-time student for the semester, but is forced to drop a course and falls below the required minimum, that student must not be allowed to continue employment until such time as the basic requirements are met. The student can request an appeal based on hardship. However, the student cannot resume work until payroll authorization is approved by the department chairperson, associate dean for research and University personnel.

JOB DESCRIPTIONS

In order to accurately classify a position for student employment, a detailed job description should be provided. Among the items that should be included in the position description are:

- Degree of supervision required Is direct supervision required or does work involve some independent decision making skills?
- Minimum knowledge and skills required Does student have sufficient classroom knowledge/academic coursework to perform required tasks?
- Does the job facilitate learning outside the classroom Does work activities enhance future development/skills?
- Complexity of tasks Does work involve complex tasking involving discretion and good decision-making skills or does it consist of routine/repetitive tasks?

WORKING HOURS

At the beginning of each semester, an approved class schedule must be on file in both the offices of principal investigator and department chairperson. Students are not permitted to work when a schedule indicated the student should be in class.

Students employed on a project are not permitted to work more than 20 hours per week during the fall and spring semesters. No work is permitted during holidays or University-schedule closures. Students enrolled in summer courses are eligible to work no more than 20 hours per week. Students not enrolled during the summer, but successfully completed the prior spring semester as a full-time student may work a 40-hour work week provided the student is registered as a full time student for the upcoming semester. The first date students can begin a 40-hour work week during the summer is the start of the first Monday after the spring semester ends. All hiring is contingent upon the availability of adequate funding.

International students are not permitted to work more than 20 hours per week regardless of fall/spring/summer status. There can be no exceptions in accordance with Code of Federal Register: 8 C.F.R. 214.2 (f) (9) (i): Please see the foreign national employment policy for detail. https://www.ncat.edu/about/hr/student-employment/index.php

(9) Employment — (i) On-campus employment. On-campus employment must either be performed on the school's premises, (including on-location commercial firms which provide services for students on campus, such as the school bookstore or cafeteria), or at an off-campus location which is educationally affiliated with the school. Employment with on-site commercial firms, such as a construction company building a school building, which do not provide direct student services is not deemed on-campus employment for the purposes of this paragraph. In the case of off-campus locations, the educational affiliation must be associated with the school's established curriculum or related to contractually funded research projects at the post-graduate level. In any event, the employment must be an integral part of the student's educational program. Employment authorized under this paragraph must not exceed 20 hours a week while school is in session, unless the Commissioner suspends the applicability of this limitation due to emergent circumstances, as determined by the Commissioner, by means of notice in the Federal Register, the student demonstrates to the designated school official (DSO) that the employment is necessary to avoid severe economic hardship resulting from the emergent circumstances, and the DSO notates the Form I-20 in accordance with the Federal Register document. An F-1 student may, however, work on campus full-time when school is not in session or during the annual vacation. A student who has been issued a Form I–20 A-B to begin a new program in accordance with the provision of 8 CFR 214.3(k) and who intends to enroll for the next regular academic year, term, or session at the institution which issued the Form I-20 A-B may continue on-campus employment incident to status. Otherwise, an F-1 student may not engage in on-campus employment after completing a course of study, except employment for practical training as authorized under paragraph (f)(10) of this section. An F-I student may engage in any on-campus employment authorized under this paragraph which will not displace United States residents. In the case of a transfer

in Student and

Exchange Visitor Information Services (SEVIS), the student may only engage in oncampus employment at the school having jurisdiction over the student's SEVIS record. Upon initial entry to begin a new course of study, an F-1 student may not begin oncampus employment more than 30 days prior to the actual start of classes.

DEPARTMENT RESPONSIBILITY

Each department/area should have a written policy that includes procedures for recording work hours, reporting absences and tardiness, discipline, breaks and student supervision. Student falsification of time records is grounds for immediate dismissal. Any student who is dismissed on these grounds cannot be employed again in CAES research activities.

PAY RATES

Freshmen and sophomores have a pay rate of \$8 per hour, while juniors and seniors are at \$10 per hour, and Undergraduate Research Scholars are paid \$12 per hour. The graduate rate is \$15 per hour or \$8000 per semester (\$2000 per month).

CAES research student employees must have payroll forms submitted to the Office of Agricultural Research at least two days prior to the date they are due in Contracts and Grants as set by the University's payroll schedule.

TERMINATION

The supervising PI should monitor the student employee on a regular basis to evaluate adequate work performance. A constructive critique should be given and documented. Poor performance is adequate grounds for termination; but a student employee should also know they may be terminated at any time.

Appendix J Post-Doctoral Support Eligibility and Request Form

Eligibility for Post-Doctoral Support

To be eligible for adding a post-doctoral to your Evans-Allen research project (*multiple principle investigator and multi-level collaborative projects*) the following must all be applicable.

 You have received at least \$200,000 in non-Evans-Allen grant funding in the past 3 years
 You have a specific need for a Ph.D. level research associate that you cannot address using current research support staff, graduate students or collaborators within the College to assist you in completing your funded research project
 You have identified enough funding in your research project budget to support the post-doc for the three-year period of their post-doctoral placement
 The necessary equipment and workspace for the post-doc to perform the tasks/objectives for which they have been hired has been identified and will be available when they start their post-doctoral placement
 You agree to be the post-doc's primary supervisor and be responsible for monitoring their work and relationships with your research team, students, other faculty and administrators within the College and across the NC&AT campus.
 You agree to conduct an annual evaluation of the post-doc's performance on your project and to report annually the results of this evaluation to the Associate Dean of Research for the College
 You will mentor the post-doc and jointly develop and implement a professional development plan as part of their post-doctoral assignment to working with you and on your research project

Post-Doctoral Research Support Request Form (submit to Department Chair)

To request permission to hire a post-doctoral to assist you with your funded project please use the following questions to support your request.

Justification for Post-Doc

- 1. Does your project need someone with knowledge and/or skill sets that the post-doc has that neither you or other members of your research team (including graduate students) **do not** have and that these knowledge and/or skill sets are not available elsewhere within the College? If so, describe these knowledge and/or skill sets. (Be specific)
- 2. Does your project need a doctoral level co-investigator to complete key tasks or objectives of the project. If so, describe these tasks and objectives and why someone with a doctorate would be important to the successful completion of those key tasks or objectives. If you have research associates or graduate students explain why you believe they could not be responsible for completing these tasks or objectives.

How the Post-Doc Will Contribute to the Achievement of the Goals of Your Research

- 3. Describe the ways you expect the post-doc to be involved in achieving the goals of your research project. (Please be specific)
- 4. Describe independent research activities you anticipate the post-doc would be doing to support and advance your research. (Please be specific)
- 5. Describe any other project related activities in which you plan to involve the post-doc.

How the Post-Doc Will Contribute to Your Capacity to Conduct Research

- 5. Describe the skill and/or knowledge sets you expect to gain from working with the post-doc.
- 6. Besides their specific knowledge and/or skill sets, are there other ways you expect the post-doc will contribute to building either your own research capacity or that of others within the College? If yes, please describe.

Your Mentoring/Professional Development Goals for the Post-Doc

7. What skill and/or knowledge sets do you expect the post-doc will acquire working with you on this research project?

Appendix K

FY 20_-20_ Annual Project Review Form

Project Name:		
Principal Investigator:		
Other Investigators:		
Department:		
Date Project Initiated:		
Projected Termination Date:		

Limit Report to 5 Pages! Do Not Exceed the Space Limits Allocated for Each Section. The description needs to be presented in the non-technical language.

1. Purpose of Project Summary (Maximum Length ¼ page)

Briefly describe the aim or purpose of the project.

2. Project Activities (Maximum Length ¾ page)

Briefly describe the major activities you and your team have been working on.

3. Project Achievements (Maximum Length ¾ page)

Briefly describe to date of what has been accomplished in achieving the project's aims and/or research questions referring to the findings.

4. Project Contribution and Impact - (Maximum Length ¼ page)

Summarize any findings that you believe could have significant impact.

5. Investigation Team Research Capacity Development - (Maximum Length ¼ page)

Briefly describe any new or enhanced knowledge or skill sets you and your research team have acquired as a direct result of this project.

6. Continuation Plans - (Maximum Length ¼ page)

Briefly describe specific plans the project team has for continuing work on this project or a related one.

7. Dissemination - (Maximum Length ¾ page)

List any publications and presentations based directly on work performed related to this project.

8. Project Implementation Challenges - (Maximum Length 1/4 page)

Briefly describe any challenges you have experiences that had a significant impact on achieving the work you had planned to complete this past year. Use the following categories: 1. Project timeline 2. Facility issues 3. Equipment/instrumentation issues 4. Personnel issues 5. Student issues 6. Budgetary issues not covered in the preceding categories 7. If None report N/A

9. Student Involvement (Maximum Length ½ page)

Describe how students have been involved in the project

STUDENT	UNDERGRAD/GRAD	RESPONSIBILITIES

10. Additional Funding Support - (Maximum Length ¼ pages)

List all grant and contract applications submitted by the research team

	Role (PI/Co-PI)	Title	Agency	Requested Amount	Funding Decision
Γ					

11. Miscellaneous (Maximum Length ¼ page)

List any developments that you believe are relevant to the completion of the project, the impact of the project, and/or that might affect receipt of additional funding.

Appendix L INTERNAL FORMS

COLLEGE OF AGRICULTURE AND ENVIRONMENTAL SCIENCES AGRICULTURAL RESEARCH PROGRAM

AG-01 (Collaboration with Cooperative Extension and Others)

AG-02 (Intent to Use A&T Farm Land, Facilities, Livestock, Personnel)

AG-03 (Involvement of Human Subjects)

AG-04 (Intent to Use Laboratory and Equipment)

AG-05 (Personnel Requirements)

AG-06 (Communications Items)

AG-07 (Appropriateness of Budget to Objectives/Available Funds) (to be completed by ARP accountant)

Purpose and Directions:

The purpose of the attached forms is to allow for a systematic review of various aspects of your proposal to the Evans-Allen program. These forms must be completed and submitted to the Agricultural Research Program office before final evaluation of your proposal can be completed. These forms are internal to the Agricultural Research Program.

Once the project and the forms are reviewed and approved, any changes in the plans as described must be approved in writing through the Agricultural Research Office.

INTERNAL REVIEW FORM AG-01

*Collaboration with Cooperative Extension and Others

TITLE OF	PROPOSAL:
PRINCIPA	AL INVESTIGATOR:
DATE:	
Directions	: Answer all questions and obtain appropriate signatures.
1.	Do you plan to collaborate with persons from Cooperative Extension on our campus' YES NO
2.	If yes, describe the nature of your collaboration with the Cooperative Extension personnel. (see description of type of collaboration below)
3.	If no, explain why not.
4.	Do you plan to collaborate with persons from Cooperative Extension from other campuses? YES NO
5.	If yes to question 4, describe the nature of your collaboration with the Cooperative Extension personnel from other campuses.
6. [Do you plan to collaborate with persons across department, CAES, University or Industry/Agencies? YES NO

*Collaboration	n can vary in type and degree:
Networking:	General discussion of topic, confirming that topic is driven by need of audiences
Partnering:	Jointly producing a product or event such as a bulletin, workshop, etc.
Cooperating:	Sharing resources and results, working together.
Collaboration	: Working cooperatively on an activity where both parties share responsibility and credit for the outcome.
gnature of PI:	
gnature of Collabo	prators:
	cumenting their involvement)
enature of Extensi	on Administrator:
	on Administrator.

7. If yes to question 6, describe the nature of your collaboration with persons across department, CAES, University or Industry/Agencies, describe the extent of collaboration.

INTERNAL REVIEW FORM AG-02

Intent to Use A&T Farm Land, Facilities, Livestock, Personnel

Principle Investigator

First name	Last name			
		Department		
Email		Phone		
	Project Inf	formation		
Project Title:				
Please indicate the CAES facility/ie	es you are reque	sting /or planning	to use?	
_	_			
Crop Land Animal Uni	it Gree	en Houses	Do not plan	to use the farm
If the project uses any facilities, ans	wer the questio	n for each checke	d item.	
	Yes	No		
Is this a renewal project?	105			
Is this a multi-year project?	Yes	No		
If 'Yes', please indicate number of y	ears:			
Project start date	Project en	d date		
/	/			
Will this project need to build any fa	arm structure?	Yes	No	

If "Yes", what type of structure?				
Have you secured funds to build the structures?		Yes		 No
•	1' 0			NO
Will the facility/ies need electricity, water, heat or co	oling?	Yes	No	
If using Cro	op Land			
What plant/crop are you planning to plant?				
Do you have plans of using any genetically modified			Yes	No
If "Yes", identify the genetically modified crop and it federal, etc. approvals.	_		_	•
If "Yes", do you have an adequate containment and i				
Please indicate the plot size you are looking for and	-		-	
Will you be using pesticides or fertilizers?	Yes	N	No	
If "Yes", list each pesticide, herbicide and fertilizer t				
Do you need irrigation?	Yes	N	1 0	
If "Yes", please indicate the type of irrigation system	_	_		
Do you need farm personnel?	Yes	No		
If "Yes", please indicate the services and duration, y	ou are seeking	g from N.C	C. A&T farm	personnel.
Do you need any farm equipment?		Yes	 No	

If "Yes", please indicate the farm equipment/s, you	-	_			
	•••••			•••••	• • • • •
	•••••				••••
If using Farm An	imals/Live	estocks			
Which animals are you planning to use?					
Have you submitted an application to the N.C. A&' these animals?					
Has your IACUC application been approved?	Yes	No			
Are you planning to purchase new farm animals?	Yes	No			
If "Yes", which animals and how many? Please also	o indicate s	source of f	unding.		
Do you need a space to house them?		Yes		No	
Do you plan a specific animal feeding or watering	regimen?	Yes	I	No	
If "Yes", please specify					
What will happen to the livestock after the project	is over?				
Do you need farm personnel?	Yes		No		
If "Yes", please indicate the services, you are seeki duration.			-	nel, and th	ie
	•				
Do you need any farm equipment?	Y	es	No		
Are you planning to use one of the research units?	Y	es	No		
If "Yes", how you will the unit be used?					

If using Greenhouse

Are you planting new plants?	Yes	No	
How much area will you need?			
Do you need farm personnel?	Yes	No	
If "Yes", please indicate the services, you are s	•	-	
Do you need any farm equipment/s?			No
If "Yes", please indicate the farm equipment/s			
Do you need irrigation?	Yes	No	
If "Yes", please indicate the type of irrigation	system, you are reques	sting.	
		• • • • • • • • • • • • • • • • • • • •	••••••
Requi	red Signature		
Principal Investigator			
Name			
Signature	Date		
E M			
Farm Manager			
Name- Leon Moses			
Signature	Date		
Associate Dean for Research			
Name- Dr. Shirley Hymon-Parker			
Signature	Date		

INTERNAL REVIEW FORM AG-03

Involvement of Human Subjects and Involvement of Animals

TITLE OF PROPOSAL:
PRINCIPAL INVESTIGATOR:
DATE:
Directions: Answer all questions and obtain appropriate signatures.
 Does the proposal involve the use of human subjects? YES (if yes, answer questions below) NO
 2. Have you obtained the Human Subjects Certification through the test on the Division of Research website? YES (attach copy of test completion certificate) NO (must obtain before submitting proposal)**
If no, why not?
3. Does the proposal involve the use of animals?
YES (if yes, answer question below) NO
 4. Have you obtained IACUC Approval for the proposed research? YES (attach copy of approval) NO (must obtain before submitting proposal)**
If no, why not?
Signature of PI:

N.C.A&T is committed to compliance with the National Institutes of Health, "Principles for the Care and Use of Laboratory Animals," "The Guide for the Care and Use of Laboratory Animals," the "Guide for the Care and Use of Agriculture Animals in Agriculture Research and Teaching," the provisions of the Animal Welfare Act, and the Good Laboratories Practice Act.

The university established an Institutional Animal Care and Use Committee (IACUC) to review activities involving the use of vertebrate animals for research, teaching, production, demonstration, or other use. Procedures of this committee and related forms can be found at: https://old.ncat.edu/research/dored/index.html

^{**}IRB and IACUC application must be completed prior to submission of proposal. https://old.ncat.edu/research/dored/index.html

INTERNAL REVIEW FORM AG-04 Intent to Use Laboratory and Equipment

TITLE	OF PROPOSAL:	
PRIN	CIPAL INVESTIGATOR:	
DATE	÷	
Direct	ions: Answer all questions and obtain appropriate signatur	res.
1.	Does this project require the use of a laboratory?	YES NO NO
2.	If yes, where is the laboratory located?	
3.	Does the laboratory require any type of renovations?	YES NO NO
4.	If yes, give a brief explanation and an estimated cost	
5.	Is this cost included in your proposal's budget?	YES NO
6.	Does the laboratory require additional equipment?	YES NO
7.	If yes, what type of equipment is needed?	
8.	Can this equipment be used for future research?	YES NO
9.	What is the estimated cost for additional equipment?	
10	Is this cost included in the proposal's budget?	YES NO
Sig	gnature of PI:	

INTERNAL REVIEW FORM AG-05 Personnel Requirements

TITLE OF PROPOSAL:
PRINCIPAL INVESTIGATOR:
DATE:
Directions: Answer all questions and obtain appropriate signatures.
 List the persons who will be involved in this research. Give name (if known), position title and percentage of time to be spent on project. a. EHRA
b. SHRA
c. Graduate Research Assistants
d. Undergraduate Students
2. Will this project require the hiring of additional personnel?
3. If yes, give position title and a brief job description.
4. Is this cost included in your proposal's budget?
Signature of PI:

Internal Form AG-06 Communications Products Included in Proposal

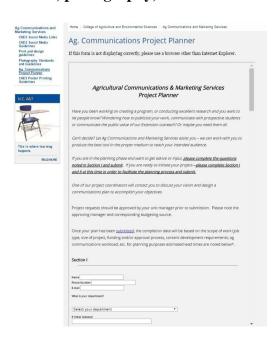
The Agricultural Communications team is dedicated to providing research faculty with professional media – graphic design, photography, videography, writing and editing, web development, and more – that will accomplish your desired communications goal.

Please fill out a communications check-up form if your proposed project will include any print or electronic communication media as part of its deliverables, including such things as video, curriculum, fact sheets, brochures, new web content, photography, etc.

This Ag Communications Project Planner Form is therefore provided as a means to assist faculty in requesting communications materials or publicity for their programs and projects. The development of effective communication materials – whether curriculum, video, web presence, press release, brochure, pamphlet or poster – involves collaboration between the subject matter experts (faculty) and communications experts in the Agricultural Communications and Marketing Services team. The form enables researchers to be proactive in determining what, if any, communication tools may be required before, during and at the conclusion of the proposed research endeavor.

Once a communications project is initiated, the form is also referred to and used to update and track progress. The form may be accessed online at:

http://dev-agcom.ag.ncat.edu/new comm planner/



INTERNAL REVIEW FORM AG-07 Appropriateness of Budget to Objectives and Available Funds (TO BE COMPLETED BY ARP BUDGET MANAGER)

TITLE	OF PROPOSAL:
PRINC	IPAL INVESTIGATOR:
DATE:	
Directi	ons: Answer all questions and obtain appropriate signatures.
1.	What is the total cost of the budget?
2.	What is the amount of the proposal being replaced? This is related to discontinuing projects within the department.
3.	Are the costs in line with funding from Evans-Allen?
4.	Are there unknown costs not discussed in the narrative?
5.	Is the budget in proper form?
6.	What revisions are necessary?
7.	What is the average project cost for the department?
Sig	nature of Budget Manager:
	(Adonica Williams)

Appendix M Impact Statements

What Is Impact?

- Impact is change or potential change in one or more key areas:
- Impact is the reportable, quantifiable difference, or potential difference, that your program makes in real people's lives
- It reports payoffs and benefits to society. The focus is on public—not internal or personal—benefit. It's the answer to. "What's in It for Me"?

Why Impact statements are important?

- Accountability
- Might be the only representation of the quality of work we do
- Serve as a comparison to other institutions

Write for the Audience

- Who is your audience?
 - Funding agencies, administrators, state, federal, and local decision makers, supporters
- What do they want?
 - Easily understood information that is quickly accessible
 - A brief summary in lay terms that highlights the difference your program is making for the public good
 - Concisely summarize what you did to achieve the difference
 - Clearly states payoff to society
 - Answers key questions: So what? Who cares? Why?
- How will they use your statement?
 - Paraphrases it for inclusion in reports and presentations

How to Report Impact?

- Problem or objective
 - Why should people care and who is affected by the problem?
- Program (optional)
 - Name the project, if it will be recognizable to your audience
- Participants
 - List every institution and academic unit involved
- Partners (optional)
 - Name other institutions, agencies, businesses, if others are involved
- Action taken (effectives impact statements)
 - Provide quantifiable evidence of change or difference the program made. (It really is all about the money. Audiences want to know the return of investment.)
 - Give other evidence
 - Realistically project potential benefit for work in progress
 - Provide only enough detail to be easily understood.
 - Highlight public benefits, outcomes, payoffs.
- Program impact or conclusion

Preferable quantifiable data directly resulting from the project

If above isn't available, a logical result of the action then, which addressed the problem in objective stated

- Write a strong "why" or issue/problem statement:
 - Do a Google search to quantify the problem.
 - Use reliable sources Center for Disease Control, EPA, USDA, etc.
 - Find "why" details in research grant proposals.
- For difficult impacts basic research, emerging issues, 4-H, FCS, academics try:
 - Anecdotes
 - If x then y statements potential impacts

SAMPLE IMPACT STATEMENTS

Farmers Grow Higher Revenue Generating Crops

NIFA funded scientists in North Dakota developed three barley cultivars which are recommended for malting and brewing by the American Malting Barley Association. The two-rowed malting barley cultivar Conlon was grown on 18% of the North Dakota barley acreage (265,000 acres). Since Conlon is a malting barley, it commanded on average a \$1.25 premium over feed barley. In 2009, this resulted in Conlon generating an additional \$23 million in revenue for North Dakota growers that grew this cultivar.

Return on Investment

The Colorado State University (CSU) Extension Wheat Improvement Work Team provides 18% of the total investment in developing and promoting CSU wheat varieties. Plantings of improved wheat varieties increased Colorado farmers' farm gate income by \$12,840,000 in 2008. Extension's share (18%) of this impact for the Colorado wheat industry is \$2,311,000, or about \$13.70 returned for each \$1.00 invested.

More Efficient Bio-refineries

Improved conversion of lignocellulosic biomass into biofuels is a high priority national research goal that will enhance national security, balance of trade, rural employment opportunities, and the nation's environmental performance, including net reductions in CO₂ emissions. NIFA funded scientists in Georgia developed a new chemical reaction that converts waste biomass lignin into high-value chemical components that will make bio-refineries more efficient and effective. This new reaction will yield high-value, renewable, chemical components derived from lignin. The new products can be used in a variety of products that are currently dependent on petroleum-based resources, as well as improve modern ethanol conversion programs.

Research Aims to Improve Child Nutrition

About 12% of the U.S. population do not consume enough zinc in their diets and are at risk for marginal zinc deficiency. NIFA funded researchers at Oregon State University found that rats fed even marginally zinc-deficient diets had more DNA damage, increased levels of oxidative stress and decreased ability to repair DNA compared to control animals fed diets containing adequate levels of zinc. Impairment of DNA integrity can adversely impact immune function and increase risk for cancer. This study has important implications for child nutrition because infants and children are more likely to suffer from marginal zinc deficiency than adults.

Appendix N Procurement Card Purchases

Date:		_	
PI:		_	
Department:		_	
Card Holder:		_	
Banner Fund #:		_	
Banner Account #:		_	
Vendor:		_	
Items to be Purchased:		<u>A</u>	<u>.mount</u>
Total:			
Explain how purchase w	ill be used:		
Approved:	PI		udget Manager
	Department Chairperson	, and the second	udget Manager
Not Approved:			
	Department Chairperson	В	udget Manager
Reason Not Approved: _			

Send to awill@ncat.edu
Phone: 285-4706

Emergencies: If the Department Chairperson is out of the office his/her designee may sign for him/her

Appendix O CAES EQUIPMENT REQUEST FORM

(\$5000 and Above)

The amount of equipment purchased by Agricultural research has increased considerably in recent years. We have learned that there has been duplication of seldom used equipment. Requests have also been made through state, facilities and other budgets. Duplicative or underutilized resources put undue strain on research budgets. It would be more cost effective to send samples to other labs that can do rare analysis rather than investing in specialized rarely used equipment. The Analytical Services Laboratory in Carver Hall has several pieces of equipment that is available to aid researchers in their analyses. Completion of this form will help us determine if equipment purchases are warranted and funds are efficiently used. Keep in mind that all equipment should be shared, but especially rarely used equipment must be made available to other scientists. In addition, any discarded equipment must be disposed using University policies and procedures (property management). Failure to properly report surplus or obsolete equipment will result in discrepancies in your annual inventory and possible loss of funds to repair existing or purchase of new equipment.

Please complete this form in terms of how it applies to either a current or proposed research project.

1.	Type of equipment
2.	Commercial Name
3.	Manufacturer/Supplier
4.	Need for the equipment (What will it be used for")
5.	If the samples can be done in the analytical Lab, explain why you are requesting this purchase for your use?
5. 7.	Does this equipment currently exist in your department or in CAES?
3.	If existing equipment is not in working order – Does this request replace existing equipment? Yes No
€.	Why is replacement versus repair necessary?
10.	What is the life expectancy of the equipment and use value after the project is terminated?

1.	Which is more cost effective, to use the services of an outside vendor or purchase this particular equipment?
	Purchase by CAES
2.	How often will the equipment be used by you and your project?
3.	In which department or lab will this equipment be located?
1.	Will students be using this equipment on their own? \(\subsection \text{Yes} \subsection \text{No} \)
5.	Is equipment safe for student use?
5.	What supervision will be provided for the use by students?
7.	What is the estimated cost of purchase (include all peripherals, installation, and necessary supplies)
3.	Does the vendor provide service and support?
	If maintenance contract is required, what is the annual cost?
€.	Are there any training costs to use the equipment? \(\subseteq \text{Yes} \) No
	If yes, what is the estimated cost?
).	Has a request for this equipment been made to any other source?
	If so, identify the source (including proposal, facilities funds, state academic budgets, etc.)

Revised September 2017

Appendix P Office of Contracts and Grants Equipment Acquisition and Management

PURPOSE

The purpose of this statement is to provide guidance that Colleges/ Schools/Departments/ Units should follow in accounting for equipment purchased from a sponsored award.

Equipment – nonexpendable, tangible, personal property having a useful life of more than one year AND acquisition costs of \$5,000 or greater. This threshold is consistent with the definition of equipment referenced in OMB circulars A-21 and A-110, University Accounting Procedures, and UNC-GA. For contracts and grants awarded prior to July 1, 1996 the threshold for equipment was \$500 or more.

Note that equipment can further be categorized as either general purpose or special purpose equipment.

Supplies – expendable property having a useful life of one year or less or an acquisition cost of less than \$5.000.

Equipment fabrication – when multiple items which could be classified as supplies (some having an acquisition costs of \$5,000 or <) are purchased to create/fabricate an integrated unit of equipment having a total value of \$5,000 or more. In these instances, the individual purchase should be budgeted and accounted for as equipment. Fabrication does not include the replacement or upgrading of existing equipment or components and these cost items are to be budgeted and charged as supplies.

Note that if an award does include the fabrication of equipment, the College/School/Unit is responsible for requesting a change from the standard equipment code to one for fabrication.

GENERAL GUIDELINES/APPLICABLE POLICIES

A. Acquisition Guidelines

1. University Purchasing Procedures:

The Principal Investigator and/or assigned personnel assisting in the acquisition of the equipment must adhere to University purchasing procedures (See Purchasing Policies & Procedures).

2. Screening Prior to Purchase:

The Office of Management and Budget (OMB) Circular A-110, Subpart C Section 44 requires equipment screening in an effort to avoid purchasing unnecessary items. This screening must be undertaken prior to issuing a purchase requisition for the equipment. The University has established the following guidelines for equipment screening:

A. The principal investigator is required to screen on a University–wide basis for availability of equipment costing \$25,000 or more. The Equipment Screening form (Form EPS1) should be completed and forwarded to the University Property Management Office. Upon receipt of the signed EPS1 form from property management, the requisition can be entered into Banner. The completed ESPI form must be attached to the purchase requisition to confirm compliance for audit purposes.

Additional screening requirements may be necessary for specific agencies. Please see award documentation for more detail.

B. Government-Furnished Property (Equipment)

This category includes:

- 1. Equipment acquired under federal contracts that are governed in accordance with FAR 45.5, Government Property and
- 2. Property furnished by the federal government to the University/principal investigator.

Equipment transferred to the University and governed according to FAR 45.5 must be recorded in the Capital Assets Management System. A copy of correspondence related to the transfer of government property to the campus is to be forwarded to the Office of Contracts and Grants.

In most cases title to federally owned property that is used by the University during the award period vests with the government. Title and disposition of government property is to be administered in accordance with FAR 52.245-5 Alternate I. Disposition and final title vestment instructions are provided by the Office of Sponsored Programs.

3. Inventory Control:

The principal investigator and the appropriate support personnel are responsible for maintaining and updating records of equipment accountable under each award.

4. Disposal of Equipment:

Equipment purchased under a contract or grant may provide for title to vest with the University. The conditions or agreement cited in the award document must be reviewed to determine if the government does or does not intend to retain title. For projects in which title to equipment vests with the University, normal University regulations related to trade, transfer or disposition must be followed. (See Purchasing and Property Management Section)

For sponsored awards that provide for the title to remain with the government, prior written approval must be received from the appropriate funding agency prior to the trade, transfer or disposition of equipment.

Note: OMB Circular A-110 allows the federal government to transfer and otherwise provide disposition instructions on all items of equipment. The equipment shall be appropriately identified in the award or otherwise made known to the recipient. Disposition instructions will be issued by the sponsoring agency within 120 days of receipt of a final equipment inventory.

5. Equipment Not in Approved Proposal/Budget

Formal approval is normally required from agencies (occasionally delegated to the Office of Contracts and Grant) prior to purchasing equipment if not listed in the approved proposal/budget. The principal investigator may want to compile a list of all anticipated equipment for a one-time approval in order to reduce the paper work and time involved in approving each piece of equipment separately.

6. Office of Naval Research (ONR)

Complete DD Form 1419 for equipment purchased from sponsored awards administered under the cognizance of ONR. Contact the Office of Sponsored Programs for Form 1419 and instructions for completing.

Revised July 1, 2009

Appendix Q

Equipment Pre-Acquisition Authorization

(To be completed prior to proposal submission for all equipment items regardless of price)

Principal Investigator:	Funding Agency and Type, (NIFA/Evans-Allen, NIFA/Capacity, NSF, DOE, etc.):
Project Title:	
Equipment Item(s) – list each item separately:	Estimated Cost(s) – price each item separately:
Proposed Location:	
Expected annual maintenance cost:	\$
Building/space modifications required: (click of If yes, attach a description of needed modificat changes. Special training required: (click appropriate box) If yes, is training costs included in final bid/qu	tions and estimate of expected cost associated with
Please provide a brief description of the equi	inment's use and attach a vendor quote.
and of the office of the offic	
The items described on this form have been approved for purchase. If denied please indi	screened by the facilities office and are hereby cate the reason below.
<u>Facilities Office</u>	<u>Date</u>

Appendix R Purchase of Gasoline, Lubricants and Other Fuels

Procurement

By means of established bidding procedures, the farm manager will procure fuel, motor oil and other lubricants through the farm budget subhead for motor vehicle supplies. This object code of the farm budget will be replenished by means of local transfer of funds from the research administrative account to the farm account.

Dispensing Fuel

Only authorized vehicles will be fueled from supplies maintained on the farm premises. These include tractors, trucks, various power machinery and vehicles assigned to research projects supported by Evans-Allen funds. Purchase of gasoline or other fuels will be done at the farm through the standard purchase order process for approved vehicles.

The farm manager or his designee will be responsible for servicing vehicles at the farm pump. An invoice will be prepared at the end of the month which notes the following:

- date
- type of vehicle
- license number
- fuel quantity and price
- type of fuel
- account number to be charged

This invoice will be submitted and approved by the business manager. The original invoice will be forwarded to accounts payable with copies going to the farm manager and budget manager.

Accountability and Transfer of Funds

The farm manager will keep an updated account of fuels on hand, and will re-order whenever necessary.

Purchase request for fuels will be made through the regular channels for a minimum of one month's estimated requirements, but not for more than three months at a time. The internal purchase order serves to inform the farm manager that the purchase is authorized in the amount and period covered.

Appendix S

Policy for Motor Vehicle Purchases and Maintained by Evans-Allen Funds

- 1. A vehicle bought with Evans-Allen funds or acquired through the Federal Excess Personal Property Program (FEPP) remains in the overall jurisdiction of the Agricultural Research Program and the research director/designee may assign the vehicle(s) to departments and/or projects as applicable.
- 2. The research director/designee may reassign the vehicle if or when the project is closed out, or if for good reason it becomes necessary to do so before termination.
- 3. Vehicles purchased for a project should be for the common use of project personnel and as directed by the principal investigator and approved by the research director. The vehicle should be used for business purpose only.
- 4. Maintaining the vehicle in good running condition is the responsibility of the principal investigator or his/her designee and he/she should ensure that neglect does not lead to abnormal deterioration of the vehicle.
- 5. The users of vehicles purchased and maintained by Evans-Allen Funds should be familiar with and be guided by the general state policy and the of the University on transportation as outlined on the website (https://hub.ncat.edu/administration/human-resources/employee-handbook/6.php).
- 6. Each vehicle should carry a log book in which the following should be recorded each time the vehicle is used: beginning mileage (speedometer reading), fuel, amount of other substances bought, and mileage (speedometer reading), number miles traveled, purpose of trip, signature and date.
- 7. It will normally be expected that a vehicle be returned to its parking site on campus after it has been used.
- 8. Fuel for vehicle used for agricultural research should be purchased at the farm pump in accordance with the procedures outlined in Appendix R of this manual. The use of privately owned credit cards to purchase gasoline or other fuels is not encouraged.
- 9. At the termination of a project, the principal investigator will turn over to the research director (or designee) the keys for the vehicle(s) assigned to the project. Should there be immediate reassignment or sale of the vehicle(s), measures should be taken to secure it, e.g., parking in the secure area of the physical plant.
- 10. The principal investigator to whom a vehicle is assigned should exercise good judgment in ensuring that the vehicle is fully used in keeping with the purpose for which it was budgeted.
- 11. The research director or his designee will make quarterly reviews of the use of all vehicles in the research program.

Appendix T Request for Extension

Submit to the Associate Dean for Research no later than February 1

(Not to exceed 4 pages)

Project 7	Γitle:
-----------	--------

Project Number: PI:

- **I. Background:** (Brief background on the project and what has been done to date; objectives and accomplishments)
- II. Justification: (Include specific objectives to be addressed in this extension period)
- **III. Activities:** (Briefly describe the activities that will be performed for each remaining objective during the extension period.)

Table 1 Proposed timeline for these activities.

Extension year 20 -20													
		Oct	Nov	Dec	Jan	Feb	Marc	April	May	June	July	Aug	Sept

IV. Attach budget narrative (indicate anticipated expenditures during the period). [Refer to original proposal.]

Appendix U

Abbreviations/Terms Used in this Manual

ARP Agricultural Research Program

USDA United States Department of Agriculture NIFA National Institute for Food and Agriculture

PC Project Coordinator
PI Principal Investigator

CAES College of Agriculture and Environmental Sciences
Evans-Allen Funds authorized in Section 1445 of Public Law 95-113

Farm Bill Federal act/authorization under U.S. Department of Agriculture

FEPPP Federal Excess Personal Property Program

Plan of Work Documentation outlining plan of research activity

CRIS Current Research Information System
EHRA Exempt from State Human Resources Act

SHRA State Human Resources Act
AAO Affirmative Action Officer
EEO Equal Employment Office

COI Conflict of Interest

Appendix V

Supplemental Document for Project Initiation

This portion is only required while submitting the proposal to NIFA.

1. **Title:** (up to 82 characters)

2. Start/End dates

3. Estimated Project FTEs for the Project Duration (3 years)

Role	Faculty and	Students with st	Students with staffing roles		
	Non-	Undergraduate	Undergraduate Graduate Post-		
	Students	_		Doctorate	
Scientist					
Professional					
Technical					
Administrative					
Other					
Computed					
Total					

Note- Full time three years will have 3 in FTE. Graduate and undergraduate students can only have half time appointment, i.e. one student for three years will have 1.5 FTE.

Graduate students and Post-Doc falls under Professional; Undergraduate students falls under other.

- 1. **Goals:** a concise statement of the goals and objectives of the project (up to 8000 characters with spaces)
- 2. **Products/Outputs:** Provide a description of planned activities, events, services, publications, databases or media products (up to 8000 characters with spaces)
- 3. **Outcomes:** Give a description of possible or expected changes in knowledge, action or conditions resulting from the research (up to 8000 characters with spaces)
- 4. **Target Audience**: Describe the target audience and efforts of the study (up to 8000 characters with spaces)
- 5. **Methods:** Describe the ways in which the project will be conducted (up to 8000 characters with spaces)
- 6. **Non-Technical Summary**: briefly sum up the importance of your project in terms that general citizens can understand (up to 8000 characters with spaces)
- 7. **Key Words:**
- 8. Proposal Classification

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

Note- Feel free to add more than one knowledge area, subject of investigation and field of

science. Please find proposal classification file in the link below. https://nifa.usda.gov/resource/manual-classification

- 9. **Associated Planned Programs:** Refer to Appendix B
- 10. **Assurance Statements:** If this research is using any animal health or forestry component.
- 11. Are Vertebrate Animals Used?

If YES to Vertebrate Animals, Is the IACUC review Pending?

If IACUC is Approved, approved Date-

12. Are Human Subjects Involved?

If YES to Human Subjects

Is the Project Exempt from Federal regulations?

Is the IRB review Pending?

If IRB is approved, Approval Date-

13. **Activities**: Indicate whether your research in 100 % research or, Extension or Education or if its divided.

Please indicate how much percent of your research is Basic, applied, development

Research effort- Basic (%), Applied (%), Development (%)

Note- Basic Research is research that has a primary goal of gaining fuller knowledge or understanding of a subject.

Applied Research is research that has a primary goal of the practical <u>application</u> (i.e. "use") of already gained or established knowledge to meet a recognized need or help solve a problem.

Developmental research is research that uses findings to <u>develop</u> (i.e. produce, create, etc.) useful materials, devices, systems, or methods.

Appendix W Logic Model

Project Title:			
Principal Investigator			

SITUATION	INPUTS	ACTIVITIES	OUTPUTS		OUTCOMES		
Description of challenge or opportunity	What's invested	What's done	New fundamental or applied knowledge, publications, patents, etc.	Knowledge Occurs when the is a change in knowledge or participants actu learn	ere Occur when there is a change in behavior or	Conditions Occur when a societal condition is improved due to a participant's action taken in the previous column	

ASSUMPTIONS These are the premises based on theory, research, evaluation knowledge, etc., that support the relationships of the elements shown above, and upon which the success of the portifolio, program, or project rests. For example – finding animal gene markers for a particular disease will lead to better animal therapies.

EXTERNAL FACTORS A brief discussion of what variables have an effect on the portifolio, program or project, but which cannot be changed by managers of the portifolio, program or project. For example — a plant breeding program's success may be depend on the variability of the weather...etc.