**NC.X-999-5-99-999-1**

**Proposal Title *(not to exceed 82 characters/spaces)***

[www.ag.ncat.edu](http://www.ag.ncat.edu)

**DATE: Month, Day, Year**

**Principal Investigator 1**

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In Collaboration with:

Office of Agricultural Research

Department of [Your Department]

North Carolina Agricultural and Technical State University

Greensboro 27411-1011

National Institute of Food and Agriculture

U.S. Department of Agriculture

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**NOTE: AG Forms are only to be completed once PI(s) are notified that the project is recommended for ADVANCEMENT TO NIFA FOR REVIEW.**

**Type of Proposal (check one):** Single PI  Multiple Co-PI  Multi-Level Collaborative

**Research Cluster Area Being Investigated:**

*Select the Research “Cluster” Priority Area that best represents the focus of the proposed research.*

Improving Plant and Animal Agricultural Systems

Protecting Environmental and Natural Resources

Enriching Youth, Family and Community Well-Being

Enhancing Food Safety, Nutrition and Health

*The following outline describes the major topic areas to be covered in the Evans – Allen research proposal. Guide questions for completing the topic areas are also included.*

# Connection to CAES Research Clusters

Insert narrative starting here… Describe how the proposed project connects with the selected initiative.

# Connection to PI’s Previous Work and Present Outlook

Insert narrative starting here… 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 this previous work.

# Scientific Approach and Literature Review

Insert narrative starting here... 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.

# Research Aim(s)/Questions and Objectives

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

# Interdisciplinary Approach

Insert narrative starting here… 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.

# Research Methodology

Insert narrative starting here... 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.)*

# Project Plan

**Probable Duration** Insert narrative starting here… 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.

**SAMPLE: Table 1.** Timetable

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Activity | Year 1 | | | | Year 2 | | | | Year 3 | | | |
| Quarters | | | | Quarters | | | | Quarters | | | |
| 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| *Project Start up*  * Purchase materials & supplies * Hire graduate student | x  x | x  x |  |  |  |  |  |  |  |  |  |  |
| *Objective 1 (Mouse studies)*   * Preparation of the two OB fractions * In vivo treatments * Biomarker studies * Analyze data * Present and publish the findings |  | x | x  x | x    x | x  x  x | x  x  x | x  x  x | x |  |  |  |  |
| *Objective 2 (Metabolomic studies)*   * Non-targeted metabolomic studies * Targeted metabolomic studies * Analyze data * Present and publish the findings |  |  |  |  |  |  | x | x | x  x  x | x  x  x | x  x  x | x |
| *Project Evaluation*   * Analyze and interpret project results * Write Final Report |  |  |  |  |  |  |  |  |  |  |  | x  x |

**Description of Specific Activities/Tasks to be Performed***.* Insert narrative starting here… 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.

**Description of How the Task(s) Relate to the Objective***.* Insert narrative starting here… 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*.*

**Description of Team Member’s Specific Expertise/Experience Relevant to Completion of Essential Tasks and/or Project Objectives***.* Insert narrative starting here… 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****.*

|  |  |  |
| --- | --- | --- |
| Task | Activity | Responsible Team Member |
| Objective 1 *(Mouse studies)*  *Task:*   1. *Set up the experimental design for the mouse study* | 1. Preparation of the two OB fractions 2. In vivo treatments 3. Biomarker studies 4. Analyze data | Davis and Silver |
| Objective 2 *(Metabolomic studies)*  *Task:*  *a) Set up the experimental design for the metabolomic study* | 1. Non-targeted metabolomic studies 2. Targeted metabolomic studies 3. Analyze data | Martin and Smith |

Note: *Include tasks that align with objective(s) and responsible individual.*

# Implementation Capacity

Insert narrative starting here… 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.*

| **Key Personnel** | **Project Roles/ Responsibilities** | **Expertise Applicable to the Project** | **Department/School/Other** |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Facility Resources 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).*

# Involvement of Scientists/Stakeholders Outside CAES

Insert narrative starting here… 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.

# Expected Outcome (Impact)

Insert narrative starting here... 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 J).

# Involvement of Students

Insert narrative starting here… *Provide details of specific student roles and responsibilities. Include student learning outcomes which indicate how the student will benefit.*

# Connection to Cooperative Extension

Insert narrative starting here… 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**

Insert narrative starting here… 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 to complete this component of the proposal. The budget narrative should ensure the items requested support the proposal goals and objectives and also 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 should request no more than 25% effort during the AY. Summer salary for nine month faculty is capped at two months. 100% research faculty may release 15% to teach if approved by the Department chair. Non-CAES faculty may request 10% effort or 1 month summer**



**Budget Narrative**

**Oct. 1, 20XX – Sept. 30, 20XX**

1. **SENIOR/KEY PERSONNEL (Note: Teaching faculty and Extension staff should request no more than 25% effort during the AY. Summer salary for nine month faculty is capped at two months. 100% research faculty may release 15% to teach if approved by the Department chair. Non-CAES faculty may request 10% effort or 1 month summer)**

Principal Investigator:

Dr. ? will devote X% of his/her time to the project and will be responsible for …

**Total Cost: $**

CoPI:

Dr. ? will devote X% of his/her time to the project and will be responsible for …

**Total Cost: $**

**Total Salaries and Fringe Benefits for PIs: $**

1. **OTHER PERSONNEL**

Postdoc, Research Associate, Res. Asst., Res. Specialist, Res. Technician, etc.

This person(s) will be hired to …

**Total Cost: $**

Graduate Students

Graduate students will be hired to… (Note: You may hire up to 2 MS students and 1 PhD student per year (see rates in EA Manual))

*Non-CAES graduate students deemed essential to a project are paid hourly graduate rates.*

**Total Cost: $**

Undergraduate Students

Undergraduate students will be hired to … (Note: You are allotted up to $17,280 for the year. See the EA Manual for rates.)

**Total Cost: $**

**Total Salaries and Fringe Benefits for Other Personnel: $**

1. **EQUIPMENT (Note: Only include items with a unit cost of $5,000 or more here, otherwise use the Materials and Supplies category.)**

**Total Equipment: $**

**D. TRAVEL**

The travel funds requested are to cover travel to...

Budgeted travel expenses are as follow:

Airfare: $/person\* ? persons/year\* 3 years = $

Ground Transportation: $/person\* ? persons/year\* 3 years = $

Hotel: $/night\* ? nights\* ? persons/year\* 3 years = $

Conference registration: $/person\* ? persons/year\* 3 years = $

Per diem: $38/day\* ? days\* ? persons/year\* 3 years = $

**Total Travel: $**

1. **PARTICIPANTS/TRAINEE SUPPORT COSTS**

**Total Participants/Trainee Support Costs: $**

**F. OTHER DIRECT COSTS**

1. Materials and Supplies – Provide a justification.

**Total Materials and Supplies: $**

2. Publication Costs – Provide a justification.

**Total Publication Costs: $**

3. Consultant Services – Provide a justification.

**Total Consultant Services: $**

4. Other – Itemize and provide a justification.

**Total Other: $**

**G. TOTAL COST: $**

# Logic Model *(Optional)*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SITUATION** |  | **INPUTS** |  | **ACTIVITIES** |  | **OUTPUTS** |  | **OUTCOMES** | | |
|  |  |  |  |  |  |  |  | Knowledge | Actions | Conditions |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **ASSUMPTIONS** |  | **EXTERNAL FACTORS** |

# References and in text citations *(Follow APA style* [*https://www.apastyle.org/*](https://www.apastyle.org/) *for reporting references- an example is presented below)*

Last Name, FI. (2011). Susceptibility of new proposal funding for the next three years. *Journal of Proposals*. 120, 930-936. – one author

Last Name, FI., & Last Name, FI. MI. (2012). Susceptibility of new proposal funding for the next twenty-three years*. Journal of Proposals*. *121*, 6-18. – two authors

Last Name, FI., Last Name, FI., & Last Name, FI. MI. (2013) Susceptibility of new proposal funding for the next seventy-three years *Journal of Proposals*. *122,* 90-99. – three authors