**Response to the Reviewers Comments**

**NETEMP\_2442: Improving Sustainable Poultry Production through Collaborative Research and Outreach**

**Duration: 10/01/2024 to 09/30/2029**

Thank you for the reviews. We appreciate the time and effort that the reviewers have invested in critically perusing the project. We have carefully prepared responses for their comments below.

**Reviewer 1:**

1. This is the largest poultry specific multistate regional project currently, and the members should be proud for the breadth of issues they are and are planning on addressing. While the proposal was strong, reorganization would aid in clarifying and leveraging collective strengths across institutions. For example, topics/sub-topics outlined (for the most part) were good in the current work/literature review, but when describing planned work, these sub-topics were difficult to follow. Objective 2b (post-harvest) also indicates work in both meat and eggs, yet only eggs are listed as part of this objective. Reorganization to clarify efforts in those sub-topics may be warranted, with special attention paid towards leveraging projects beyond the capabilities of singular scientists and singular experiment stations.

**Response:** The section has been revised to reflect the topics/sub-topics discussed in current work. Considering that the rewrite slightly varies and adds to the ongoing projects, we have tried to incorporate the changes in a reasonable manner. The changes have been highlighted in the methodology section.

2. For the outreach and training, the group should consider ways to elevate the work of collective group (or larger subgroups therein). While only briefly mentioned, the Poultry Extension Collaborative is an example of a collective effort. The group should also be considering ways to actively engage stakeholders (beyond just presentations at meetings, and this was not directly communicated. Some stakeholder groups to engage with and become involved in meetings could include the Egg Industry Center, the International Poultry Welfare Alliance, and the US Roundtable for a Sustainable Poultry & Egg Supply. No specific plan was relayed for recruitment of other scientists to this group. Very much appreciate involvement of any economist and value they would bring to efforts, and strategies to bring in other scientists beyond animal/poultry faculty would be rewarding to broaden efforts (e.g. systems modeling - LCA).

**Response:** This has been, addressed, in the outreach and training section of the project objectives.

**Reviewer 2:**

1. The participants need to include additional details including the specific parameters to be evaluated in proposed experimental trials. The document contains mainly general nonspecific terms such as: feed ingredients, additives, feedstuffs, alternatives, supplements, formulations, management, programs, strategized feeding programs, disease management, and food safety.

**Response:** More details have been provided on methodology regarding specific compounds and parameters used in the Methods section.

2. This project has identified several broad areas and the timely issues important to today’s poultry production industry in the Unites States for improving sustainable poultry production.

The proposal is multi-disciplinary/multi-state and represents research approaches that should improve productivity, well- being, and food safety.

Hopefully, the results will be significant improvements that the poultry industry stakeholders can utilize to address both pre-harvest and post-harvest challenges.

I am concerned about the absence of details provided and the over broad general goals presented in the proposal.

The proposal identifies both institutions and researchers that have been displayed solid expertise in their specific fields of study and past productivity.

**Response:** Thank you for the review. As mentioned in the previous response, we have revised the method section accordingly.

**Reviewer 3:**

1. This project has identified critical and timely issues to the poultry industry. The proposed multi-disciplinary/multi-state proposal represents a logical and well-outlined approach to the topic of improving sustainable poultry production. I am positive that the industry stakeholders await the successes and contributions that this collaborative effort will generate. The contributions will be significant to the poultry industry stakeholders, addressing a variety of both pre- and post-harvest challenges. I was originally concerned about the extremely diverse and complex objectives and goals set forth in this proposal, but after thoroughly reviewing the research institutions and researchers partnering in this project, I am fully comfortable in their likelihood of success. The proposal identifies both institutions and researchers that have been displayed solid expertise in their specific fields of study.

The only statement that I feel needs clarification is toward the bottom of the Section "Examples of sustained endeavors by NE1942 participants include:" and in then repeated in the "2a. Pre-harvest" section. The statement "The CA station collaborates on the investigation of woody breast causes a measurement method in broilers". It appears that this statement is incomplete and needs additional clarification.

**Response:** We appreciate the feedback from the reviewer. The statement has been revised for clarity in both places as “The CA station collaborates on the investigation of various causes of woody breast and its measurement methods in broilers”.

**Reviewer 4:**

1. This is an impressive and expansive project. Very impressive outputs from the last 5-year cycle. Good cooperation across groups and some important research areas proposed. Appreciate the inclusion of AI technology. Strong team that should generate impactful data. May have been the uploading system but some editing issues throughout, lots of commas randomly through document.

**Response:** Thank you for your comments. The uploading system did not allow for certain changes and hence the final document is differently formatted. We will try to sort the issue with the website.

**Thank you!**