PROJECT SUMMARY

Instructions:
The summary is limited to 250 words. The names and affiliated organizations of all Project Directors/Principal Investigators (PD/PI) should be listed in addition to the title of the project. The summary should be a self-contained, specific description of the activity to be undertaken and should focus on: overall project goal(s) and supporting objectives; plans to accomplish project goal(s); and relevance of the project to the goals of the program. The importance of a concise, informative Project Summary cannot be overemphasized.

Title: Developing A Reproducible Research Curriculum From Real-World Examples In Agriculture

PD: Kamvar, Zhian	**Institution:** University Of Nebraska-Lincoln
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Agricultural science research often directly impacts agricultural producers, and thus, it is imperative that production stakeholders are able to trust the viability and integrity of agricultural research. The practice of open and reproducible research, where all steps of the scientific process are made freely available and verifiable, holds many benefits for scientists including increased public confidence in science. The goals of this integrated post-doctoral project include: 1) creating a course on reproducible research using modern, active-learning techniques that utilize real-world examples in agriculture and (2) developing an example of a fully open and reproducible research project using a genomic investigation of thermal adaptation in the cosmopolitan plant pathogenic fungus _Sclerotinia sclerotiorum_ across the United States and China. _S. sclerotiorum_ is the causal agent of Sclerotinia Stem Rot and infects over 400 plant species, causing millions of dollars in damage in the United States, annually. Because understanding thermal adaptation will help management decisions in a changing climate and training in reproducible practices will have the long-term effect of improving the quality of scientific research, this project falls within the “plant health and production and plant products” foundational area. Under the mentorship of Dr. Sydney Everhart (University of Nebraska-Lincoln), This project will enhance my skills in science education and genomics research, preparing me well for a successful transition to a faculty position, and fulfilling the goal of the fellowship program to train the next generation of agricultural scientists.