

Dear NSF GRFP Program Committee:

I am writing to appeal the eligibility decision of my NSF GRFP application. My name is Nicholas Carleson and I'm a PhD student in my second year at Oregon State University. My PhD program is not a professional program, nor am I enrolled in a joint or combined professional degree-science program. My application was likely considered ineligible based on the title of my degree program (Plant Pathology) and on wording early in my research proposal that may make my field of study appear to be focused on epidemiology with goals that are directly health-related. However, my research proposal is focused on *Phytophthora ramorum*, a pathogen on Oak trees, with methods and goals not focused on epidemiology but on understanding biogeography and evolutionary processes related to this plant pathogen.

The wording of the solicitation is clear in that eligible degree programs do not include clinical practice, patient-oriented research, or even epidemiology research. And, the solicitation states that "Research activities using animal models of disease, for developing or testing of drugs or other procedures for treatment of disease, and statistical modeling for which the purpose is diagnosis or epidemiology also are not eligible for support." At the beginning of my research proposal I wrote, "Understanding how pathogens of global concern evolve during an outbreak will allow us to better control outbreaks. Tracing an outbreak to its origin is challenging but is routinely done for human pathogens, such as the Ebola virus outbreak of 2014..." I understand how that wording may mislead a reader into thinking I study a human or animal pathogen, but it was merely meant to give context for the impacts of plant pathogen research. It was an explanation for the following two sentences in which I introduce my field of study directly. I will never use humans or other animals as models in my research, nor do I describe doing so in my application. Furthermore, I do not claim in my application that the proposed research will even benefit disease-focused research of humans or other animals.

Additionally, my research activities and field of study do not include etiology, diagnosis, prevention, or treatment of these plant diseases; as stated in my proposal I will study the *evolution of genome structure and virulence associated with [plant] pathogen emergence*. This is not disease-focused research, but research to understand what genomic features of this invasive species allow it to thrive in a new environment, and how successive migrations continue to shape genome architecture. Thus, my research activities do fit within "Evolutionary Biology," the field of study under which I applied to the GRFP.

Outside my research proposal, my personal statement discusses how "I will use my PhD to pursue a career studying humanity's impact on evolution..." My planned research activities to study evolution of the plant pathogen *P. ramorum* are but one way of understanding how humans shape complex evolutionary processes. My current program of study and proposed field of study are not designed explicitly to improve plant disease management, although it may more broadly impact those fields. As I outline in both submitted essays, my goals are to advance understanding of evolutionary processes underlying the introduction of a species to a new environment and what allows its establishment.

Sincerely,

Nicholas Carleson