NON-TECHNICAL ABSTRACT: *(State in layman's terms the application's broad, long-term objectives and specific aims, making reference to the potential public benefits of the project.)*

Influenza virus poses a serious threat to both human health and the global economy. Slow vaccine production and the emergence of strains resistant to current antiviral medications highlight the need for greater comprehension of the influenza virus life cycle. The proposed research is ***relevant to public health*** as it aims to advance understanding of the influenza A virus life cycle with the ***overall goal*** to control influenza related disease and enhance human health. The research strategy will make a ***significant contribution*** to the education of life science undergraduates and graduate students and train them in scientific thought process and applicable biotechnology practices. The ***rationale*** for the proposed research is that identification of influenza viral mRNAs which do not use either known host mRNA nuclear export pathway can be employed as part of our ***long term goal*** to discover atypical host nuclear export pathways. These atypical pathways may prove useful as novel antiviral targets with little adverse cellular effects. The ***expected outcomes*** from this project will help alleviate current confusion in the literature regarding influenza mRNA nuclear export and identify viral mRNAs which do not utilize known host mRNA nuclear export pathways. The project will have a ***positive impact*** for California by training students in a relevant and emerging field. These students will be well equipped to go on and make positive contributions to biotechnology.