

LUNENBURG PTO REQUEST FOR FUNDING

APPLICATION MUST BE TYPED AND SUBMITTED BY EMAIL

- Please complete this form and email it to the Lunenburg PTO.

APPLICANT INFORMATION

Applicant Name: Craig Pingsterhaus

Position: LHS science teacher

School: Lunenburg High School

Contact Phone Number: 978-582-4115

PROJECT INFORMATION

Project Title: Biotech Gel Visualization (used in several labs)

Amount Requested \$150 (for UV light)

Project Start/End Dates: will occur every semester that Biotech is offered at LHS

1. Project Description: Summarize the proposed project in the space provided. Describe who is the target audience; what will happen; when and where it will occur; and how the project will be executed. NOTE: You may provide additional narrative on a separate sheet of paper, but you *must* summarize the project here. Your answer in the space below may not exceed 750 characters.

The Biotech course has labs where DNA is run through a gel and made visible by staining. Currently we use Methyl Blue as a stain, which is messy, time consuming, and inconsistent. Recently the class performed a lab with the help of Mount Wachusett Community College (MWCC). In the lab, DNA was stained using Sybr-Safe. Sybr-safe glows when exposed to UV light with a wavelength of 254 – 302nm. LHS doesn't own such a light. When the students saw how clean, easy, effective, and visually stimulating Sybr-safe was, they appeared wowed and I heard oohs and aahs. I believe this improves the impact of the labs, adds interest, and is more like what occurs in the industry of biotechnology (this is a tech prep course for which we have an articulation agreement with MWCC).

2. Describe the planning process for this project. What individuals and organizations have been involved as partners and/or advisors? How would partial funding impact this project? Your answer in the space below may not exceed 500 characters.

It is difficult to describe the planning process because the UV light will be used in several labs during the Biotech course. It impacts how the individual labs are planned and implemented. MWCC is involved as a partner because of the articulation agreement concerning this course. If only partial funding is provided, then the Biotech course will likely not get the UV light because that would take away from other materials needed for the Biotech course as well as the other course I teach.

3. Explain how this project will reach and benefit the students of your school. How will you know the project is successful? Your answer in the space below may not exceed 500 characters.

Besides the Biotech labs where DNA is run through a gel, a protein that glows in UV light is used in other Biotech labs. Then, since the UV light would now be accessible, additional uses for it in the other courses could be discovered. Success will be achieved if the Biotech labs are improved and the UV light is used in the other courses taught by myself or other teachers.

Signature

Title

Date

FOR PTO USE

SUBMITTED BY DEADLINE __ yes __ no

\$

Amount

Approved Signature of PTO Representative

Title

Date