EQUIPMENT NEEDS ASSESSMENT APPLICATION Fall 2017

Name of Person Submitting Request:	Tatiana Vasquez
Program or Service Area:	Biology
Division:	Science
Date of Last Program Efficacy:	Spring 2017
What rating was given?	Continuation
Equipment Requested	Ultra low temp freezer
Amount Requested:	\$11,000.00
Strategic Initiatives Addressed:	Goal 1, Access
<u>Strategic Directions + Goals</u>	Goal 2, Student Success
	Goal 6, Infrastructure to meet needs of
	students

NOTE: To facilitate ranking by the committee, submit separate requests for each item; however, multiple items can be submitted as one request if it is required that the equipment is packaged together.

Replacement X	Additional □
Are there alternative	funding sources? (for example, Department, Budget, Perkins, Grants, etc.)
Yes □ NO □	⊐ X
If yes, what are they	?

1. Provide a rationale for your request. (Explain, in detail, the need for this position.)

The ultra-low temp freezer is equipment for laboratory preparation in association with courses in Microbiology (Bio 270). The biological organisms that we utilize in our microbiology experiments are stored in the ultracold temperature freezer to prevent their deterioration in the long-term. When placed in a regular household freezer, they are damaged and cannot be used for laboratory activities. The current ultracold temperature freezer has past its warranty period, parts have been replaced without any guarantee in its longevity. This essential equipment could fail anytime, thus placing the 6 laboratory sections of microbiology in jeopardy of completion. Microorganisms are used every week in each of the sections per semester. All activities stem from their availability to 28 students per section. Microbiology is a five-unit course that means that it would impact the lab activities twice per week per section. Microbiology is also offered during the summer session, often as a double section. These students would also be impacted.

2. Indicate how the content of the department/program's latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. (Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)

The ability of the Biology Dept. to meet and take advantage of changing technology is contingent upon having the necessary resources and take preventive measures so that students are not negatively impacted. If we are to support the community enter CTE-related fields in biology (EMP p. 2), then we must have the resources before they fail. Microbiology is directly influencing one of the major areas of our programs' purpose which is to support the nursing and professional allied health programs such as pharmacy and physician's assistant, among many

others (Program efficacy report pp. 12-13). Failure of equipment could in turn have large negative impacts on supporting a regional growth in allied health careers (Program efficacy report pp. 12-13) as the opportunity of growing number of sections (EMP p.1) would need to be scaled back.

3. Indicate any additional information you want the committee to consider (for example, regulatory information, compliance, updated efficiency, student success data, planning, etc.).

4. Indicate any related costs (including any ongoing maintenance or updates) and department/program's plans to support those costs.

There is a scarcity of funds available by the college to support the maintenance of this and other lab equipment. The Science division is requesting support for these costs every year.

- 5. What are the consequences of not funding this equipment?
 - Cancellation of laboratory activities in Microbiology. Negative effect on our COR commitments.
 - Surcharge and/or raise budget supply costs to make microorganisms available from biological vendors on a weekly basis.
 - o Limit microbiological laboratory exercises. Negative effect on our COR commitments.
 - o Under preparation of students in Microbiological lab activities and skills.
 - Weaken employability and/or career success of allied health students (Program Efficacy report p. 19).