EQUIPMENT NEEDS ASSESSMENT APPLICATION
Fall 2017

Name of Person Submitting Request:	**Tatiana Vasquez and Soha Sobhanian**
Program or Service Area:	**Biology**
Division:	**Science**
Date of Last Program Efficacy:	**Spring 2017**
What rating was given?	**Continuation**
Equipment Requested	**Human Anatomy Models**
Amount Requested:	**10,000**
Strategic Initiatives Addressed: Strategic Directions + Goals	Goal 1, Access Goal 2, Student Success

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 **X**

1. Provide a rationale for your request.

Biological models are the bedrock of anatomical science. They provide the student with an experience that is visual and kinesthetic. Approximately 60% of the sections taught in Biology are in the subject areas of anatomy and physiology. These courses prepare students for the health science courses taught at Valley College. These models are critical to anatomical studies and support the needs of more than one program as it prepares students to do well in Nursing, Psych Tech, etc.
We request some new models that will provide valuable addition to our current model collections and will further enhance our instructional abilities and the replacement request for older and worn out models because of extensive student use. All the models that we use can be taken apart to reveal internal structures. The process of continually working with the models semester after semester wears on the general structure of the models and they must be replaced periodically. We have surveyed our current models and have determined that those listed in this category should be replaced as soon as possible.

Anatomy and Physiology classes primarily support the CTE goals of our program. A majority of the courses in Biology prepare students to enter Allied Health courses. Therefore, the support of these classes impact not just student success in Biology, but other programs in the college. The impact of student success reaches well beyond these courses. Students that complete the Allied Health programs, like Nursing, enter careers that enrich both the student and the local community. Instructional programs in Human Anatomy enriched by physical models benefit all levels of student success.

2. Indicate how the content of the latest Program Efficacy Report and current EMP data support this request. How is the request tied to program planning? *(Reference the page number(s) where the information can be found on Program Efficacy.)*

The 2017 Program Efficacy document, Student Success p. 8 and Planning p. 19 illustrates the high demand for Registered nurses. The department is committed to expand articulation agreements to increase enrollment of high school students into allied health courses (EMP p. 2). Nevertheless, their preparation with meaningful skills for transfer and employment are required.

Scientific equipment is not cheap; the funds available to the department are limited (see Program Efficacy Report, *challenges* p. 20).

3. Indicate if there is additional information you wish the committee to consider *(for example, regulatory information, compliance, updated efficiency, student success data, planning, etc.).*

Students have a variety of learning styles. Models enables students, such as kinesthetic learners to visualize concepts. However, absence of the models or utilization of damaged models hinders their learning. This could also affect visual learners who require 3D representation of human body organs/structures rather than the drawing or pictures of the models.

4. Evaluation of initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources (*for example Department, Budget, Perkins, Grants, etc.*).

The requested models are Nerve plexuses, brain, and muscles of the human body.
Nerve plexus: 2000 ($ 390 x 5)
Brain models: $2400 ($200 x 12)
Arm model: $3600 ($880 x4)
Half lift size muscular figure: $2000 ($950 x2) + shipping costs
These are essential structures that are necessary to create an effective learning environment for our students so they can fully comprehend the inner working of the human body.

5. What are the consequences of not funding this equipment?

Shortage of appropriate models or utilization of worn out ones, significantly affect the success rate of our students in the course, the overall success of the program, and the future career of our students. Furthermore, some of the muscle models pose dangers to students, as the worn-out pieces do fall out as models are used which creates a hazardous environment for our students and instructors.