Department of Microbiology
Student Presentation LCD Projector

A Proposal Submitted to the
College of Agriculture
by
The Department of Microbiology
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Proposed by
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I. Project Overview and Expected Benefit

Description of and Intended Purpose for all Project Expenditures; Identifying Expenditures from Central Pool Funds

The goal of this project is to supply the undergraduate and graduate students enrolled in Microbiology classes with the equipment necessary, specifically a LCD projector, to present Microsoft PowerPoint and other computer-based presentations.

The current equipment available to students is several years old and failing. Students enrolled in certain Microbiology classes are encouraged to create computer-based presentations for class, but unfortunately do not have the equipment necessary to effectively present them to an audience.

A new LCD projector made available to the Microbiology Students will not only provide them with the means to create vivid presentations for their audiences to view, but it will also empower the students with the experience of computer-media presentation; an experience that they can use later in their chosen professions having graduated from Iowa State University.

Description of How the Proposed Facilities and Services Will Be Made Available to Students

The specific hours when the facility and service will be available for general student use

The LCD projector will be available for checkout during normal office hours 8:00 a.m. to 5:00 p.m., Monday through Friday. These hours may be expanded as long as there is a member of the Microbiology faculty or staff that would be able to check the LCD projector back in overnight.

The number of students able to work simultaneously during these hours

A group of students could potentially checkout the LCD projector to preview their presentations, as several presentations could be loaded on a single laptop, or individuals with laptops could take turns using the LCD projector.

The student population that will benefit from this proposal

There are approximately 800 students registered for Microbiology classes, including both undergraduate and graduate students.

Description of New Technologies

There are two LCD projectors that were researched for this proposal. The first is a Sharp PG-C30XU projector with the following features and specifications:

- 1700 ANSI Lumens brightness with excellent uniformity
- Two Separate Data Inputs for PC or Mac plus monitor out
- AutoSYNC for automatic image perfection
- Intelligent ImageACE Resizing supports VGA to UXGA resolutions
- 110-240V AC international traveler power supply
- Power Remote with wireless mouse control and laser pointer
The second is a Boxlight MP36T-000 LCD Projector with the following features and specifications:

- 1600 Lumens
- Two separate data inputs for PC or Mac
- Power Remote with wireless mouse control and laser pointer
- Digital Keystone Correction with edge smoothing for distortion free set-up
- Display Resolution: XGA (1024 x 768)
- 2000 hour lamp life
- Weight: 15.2 lbs.

These two LCD projectors were chosen for their lumens rating to their price. The lumens rating measures the apparent brightness of the projector's image. The larger the room, the higher the lumens rating you'll need, because the light emitted by the projector disperses over distance. Most classrooms are fairly large, and the trouble with the older equipment is that it is not bright enough to project clear enough to be read. Both units have a lumens rating above 1500 and should suffice for the classrooms that either will be used in.

The two projectors were also chosen due to their compatibility with both Macintosh and PC computers. Microbiology has both Mac and PC laptops available for students to checkout. Also compatibility allows a wider range of computers for the students to choose from when giving their presentations.

University Facilities Required

This proposal requires minimal university facilities. A classroom with a projector screen or wall, a table, desk or cart to place the unit, and a laptop or media device to connect to the LCD projector. As mentioned the Microbiology Department has both Macintosh and PC laptops available to the students.

II. Support and Maintenance

Support and maintenance should be minimal as long as the projector is used correctly. Training will definitely be made available for those interested in learning how to set up and best utilize the LCD projector, as well as an instructional manual provided with the projector showing proper use. While the LCD projector is not in use, it will be stored safely in a locked closet along with the other equipment available for checkout. Training and any maintenance will be provided by the Computer Specialist.
### III. Budget

#### Table 1: Full Itemized Budget
(Cost for the Entire Project)

<table>
<thead>
<tr>
<th>Description of Item</th>
<th>Number</th>
<th>Unit Cost</th>
<th>Total Cost by Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>Central Pool</td>
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<tr>
<td><strong>Hardware</strong></td>
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<td><strong>Total Request</strong></td>
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#### Table 2: Minimum Feasible Itemized Budget
(Cost for Minimum Feasible part of the Project)

<table>
<thead>
<tr>
<th>Description of Item</th>
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<th>Total Cost by Funding Source</th>
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</thead>
<tbody>
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