BUDGET NEEDS ASSESSMENT APPLICATION

| Name of Person Submitting Request: | Mark Ikeda |
|------------------------------------|-----------------------------|
| Program or Service Area: | Biology |
| Division: | Science |
| Date of Last Program Efficacy: | Spring 2009 |
| What rating was given? | Expansion |
| Amount Requested: | \$6300 |
| Strategic Initiatives Addressed: | Student Success, Technology |

1. Provide a rationale for your request.

The Biology Department's microscopes are the most commonly used pieces of scientific equipment in the department. They provide the versatility that allows students to perform qualitative and quantitative analysis of a diversity of life that cannot be encountered by any other means. The importance of microscopes to biology might be illustrated by equating them to brushes in a painting class, works of literature in English courses, or glassware to chemistry.

2. Indicate how the content of the latest Program Efficacy Report and/or most current EIS 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.)

During the last 2 years an average of 71% of all students taking biology courses used microscopes (Div EIS Summary, Fall '10 to Fall '12). Assuming 6hrs of microscope (conservative estimate) use by each of these students, the department's microscopes accrue a per sem avg use of 12700 hours, which works out to approximately 70 hours of use per microscope.

The students enrolled in Biology classes that use these microscopes are representing all areas of the Biology Department (ie Allied Health, Gen Transfer, Major's Transfer categories see Table p7 '09 Biology Efficacy Report).

The use of microscopes is identified explicitly and implicitly in COR's lab activities for Biology 100, 109, 155, 201, 202, 250, 251, 270.

- 3. Indicate if there is additional information you wish the committee to consider (for example: regulatory information, compliance, updated efficiency and/or student success data or planning etc).
- 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, VTEA or Perkins).

The amount requested is to be used to increase the microscope maintenance budget in the Biology Department to a level that will ensure that all microscopes can be maintained once each

year. This will cover the costs of replacing minor worn or missing parts as well as cleaning and lubrication. There is a current budget account, 5640 that contains funds for this purpose. There are no alternative funding sources for this available to the Biology Department.

5. What are the consequences of not funding this budget request?

The Biology Department currently has 180 microscopes that were purchased in 1998 (see 2010 budget needs assessment item #1) by a generous one time donation. The average cost of replacement for this number of scopes currently can be estimated to be approximately \$3K per microscope times 180 scopes = \$540K