

Six plus Years of College Based Fees in the Biological Sciences Department

From Fall 2002 to Fall 2008

Over the last six and a half years, the Biological Sciences Department has spent more than \$2.8M from the College Based Fee program and benefited tremendously as a consequence. In general our expenditures fall into the three categories outlined below:

Providing Access to Excellent Classes

Over \$1.1M was spent over the last 6.5 years to ensure that Biology and Microbiology majors were getting the best possible learning experiences. Some of the key expenditures included:

1. **Part-time Instructors:** >\$700K, to free biology faculty to teach the fascinating upper division specialty courses our majors enjoy.
2. **Field Trips:** >\$90K, to give our majors great field experiences without extra fees.
3. **New Biology Introductory Series:** >\$24K, to revamp the major's introductory series to better reflect current trends in biology education.
4. **Classroom Supplies:** >\$160K, to provide our students are mastering the same modern lab and field methods they will be using when they leave Cal Poly and get jobs.
5. **Supplemental Services:** >\$60K, including starting important journal subscriptions at Kennedy Library, maintaining the biology computer room, funding the Environmental Career Symposium, and more.

Enabling Student Centered Research

Over \$0.5M was spent over the last 6.5 years to allow Biology and Microbiology majors and the biology graduate students were able to work with faculty on their own research projects, help faculty with their research and travel to national and international meetings to present their findings. Some of the key expenditures included:

1. **Graduate Student Research:** >\$110K, for graduate students to define, implement and/or present their own research independent of faculty initiated funding. Grads are allowed to apply for \$2K each with approval from the department.
2. **Undergraduate Research:** >\$130K, for undergraduate students to define, implement and/or present their own research independent of faculty initiated funding. Undergrads are allowed to apply for \$1K each with approval from the department.
3. **Student Faculty Interaction Program:** >\$190K, for faculty to pay students to work with them, either in their research or to help with their teaching.

Modernizing Teaching and Research Equipment

Almost \$1.2M was spent over the last 6.5 years to update the Biology Department with the latest in modern scientific equipment. Some of the key expenditures included:

1. **Microscopes:** >\$195K, we've replaced over 5 teaching laboratories worth of microscopes, some of which were more than 30 years old. We've also added new technologies, digital cameras and imaging software.
2. **Autoclaves:** >\$107K, we've replaced three out of four of the department's autoclaves, some of which were more than 30 years old.
3. **Physiology Monitoring Modules:** >\$110K, modern computer assisted equipment for real-time monitoring of human, plant and animal physiology were purchased for over 6 classes.
4. **Computers:** >\$160K, modern equipment in biology is run on computers, so to teach modern biology we've needed to give students access to computers in the Biology Computing Facility, in laboratory classrooms and in faculty research laboratories.

5. **Faculty Specialty Equipment:** >\$420K, over 50% of the department was hired during the last 6.5 years and these new faculty brought new expertise and research to Cal Poly, consequently we supported their ability to bring students into their labs and get them involved in their research. Some examples of the equipment purchased include: cell sorter, MALDI/TOF/TOF mass spectrometer, fluorimeter, plate pourer, plant growth chambers, spectrophotometers, 96-well plate readers, GPS units for field classes, atomic analyzer, and many more...