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The Department of Biology would like to extend its gratitude to Dr. Shannon Datwyler (Sacramento State University) and Dr. Phyllis Robinson (University of Maryland – Baltimore County) for sharing their time, effort, and wisdom with us. We are very much in alignment with what they see as our strengths and challenges. As staunch advocates of the teacher-scholar model, we are especially pleased by their recognition of our excellence in both teaching and research.

We are pleased to report that ALL of the evaluators' recommendations align with our Departmental priorities. For the purposes of this document, we are sorting their recommendations into 4 categories; urgent, high, medium, and low. Below, we list their recommendations in order of priority and outline our specific plans to address them:

Urgent Priority

Budget

4.15. We recommend that the University incorporate the indirect costs of instruction (i.e., supplies, graduate assistants and technical staff positions) into the University budgeting model.

4.20. We recommend a collaborative meeting with the Provost, Dean of College of Science and Engineering, Chair of the Department of Biology, and the Associate Vice Provost of Academic Resources to figure out the discrepancy in understanding of the allocation of augmentation funds in the College's budget.

The Biology Department seats over 8700 students each semester, which is more than any other department on campus (Math comes in at a distant second with roughly 5100 students seated each semester). In addition to ensuring that adequate sections of required courses are available, we are committed to creating inclusive classrooms and offering authentic hands on experiences for our students. All of these efforts are critical to our success in increasing retention and graduation rates for both our URM and non-URM students. Furthermore, employers of SF State Biology graduates frequently report that the hands on experiences offered by the Department distinguish our graduates from those of other institutions. The cuts to our GA and SA funding reduce our capacity to use innovative and inclusive teaching strategies in the classroom. They also have a detrimental impact on our ability to offer experiential learning opportunities as GAs and SAs provide critical support for our wet lab and field courses. Cuts to our supplies and services allocation also have a similarly detrimental impact on student success. Historically, our supplies and services allocation has funded critically important items, such as those listed below:

1. Service contracts for instructional equipment, such as autoclaves, copiers, and the fluorescent cell sorter (the service contract for just our autoclaves is over \$25K/yr)
2. Lab and field supplies (because financial stability is critical to student success, the lab fees that we charge students are well below the actual cost of supplies for those courses)

3. Computers (while there is a computer refresh program for T/TT faculty, there is no mechanism other than Instructional Equipment Requests to replace computers used for instructional purposes)
4. Annual calibration of pipettes and maintenance of microscopes (essential for lab activities)
5. Faculty development around teaching (eg the SEPAL summer institute)
6. Equipment (while the Instructional Equipment Request mechanism allows us to replace some aging and broken equipment, it is insufficient and does not allow us to replace essential equipment that fails during the academic year)

Because of the key role that Biology plays in the curriculum across campus, it is critically important that we work together to stabilize the Biology budget such that the allocations reflect the true cost of instruction and not just the direct cost of instruction. To this end, Biology is working on a detailed Budget Proposal for FY2020. While we very much support the idea of collaborating with the Provost, the Dean of the College of Science and Engineering, and the Vice Provost for Academic Resources, we recommend that the process start with the Biology and CoSE leadership so that we can ensure a common vision going forward.

4.10 We recommend that the College and University consider funding an accountant/analyst in Biology that can track and maintain budgets, and also help support faculty with travel and other expenditures related to their research laboratories.

We are fully in favor of this and had hired staff (0.25 time base) to assist with the highly complex Department budget. However, due to financial constraints, the College recently withdrew its financial support for this position. We wonder if it would not be more cost effective to create an accessible portal to the Financial Data Warehouse so that it is easier for people without degrees in finance (eg: Chairs and departmental staff across campus) to review revenue, expenditures, and available balances.

Graduate Funding

4.16. We recommend that the University continues to fund fee waivers for graduate teaching assistants on an ongoing basis to bring quality graduate students to San Francisco State and which will likely reduce the time to degree for graduate students.

The Biology Department has one of the largest graduate programs on campus. However, the combined effects of the exorbitant cost of living in the Bay Area and the cuts to our GA support (as part of our overall budget cuts) have left graduate students in financial straits and have impacted our ability to recruit new graduate students. Biology faculty worked hard to develop a model that coupled graduate student funding to undergraduate student success. In this model, graduate tuition is waived in exchange for students' committing to serve as GTAs. Because hiring GTAs is less costly than hiring new lecturers, the ability to offer GTA tuition waivers is expected to be budget neutral. As such, we recommend continuing and expanding the current GTA tuition waiver pilot program. In addition, the pedagogical training received by these students is expected to increase retention rates of undergraduate students across campus.

High Priority

Stabilization of Staffing

4.17. We recommend that the University, College and Department work together to stabilize support staff within Biology, preferably with permanent positions (i.e., seawater position and greenhouse position). We also recommend that through these conversations, a clear and consistent mechanism be used to hire replacement positions, with interim support provided when positions become vacant.

Biology is fortunate to have an equivalent of 14 full time staff members to support its course offerings. However, because the salaries do not match the high cost of living in the Bay Area, there is a significant rate of turnover. Even when we have been well prepared for departures, it has often taken months to get a new hire approved, the search conducted, and the hiring paperwork finalized. As such, we have experienced extended gaps in service. While we are very happy to have a permanent greenhouse coordinator in place and office admin and seawater positions approved, the gaps in service have placed an enormous burden on faculty and staff, who have taken on additional duties for no extra pay. We heartily agree with the evaluators that interim support should be provided when positions are vacant.

Space

4.11. We recommend that the Department, College and University work together in the design of the new science building to develop teaching spaces that allow for inclusive pedagogical techniques on a large scale (i.e., 300+ students).

4.14. We recommend that the University provide funding for laboratory renovations that will increase the capacity for course offerings in bottleneck courses (i.e., first floor lab space that has been identified in Hensill Hall).

Biology has aligned itself with the student success and graduation initiative by promoting inclusive teaching strategies and increasing course availability. We have virtually erased the equity gap while increasing student retention and graduation rates by utilizing innovative student centered pedagogies. However, there are no spaces on campus to support the use of innovative teaching strategies for large classes, such as BIOL 230 (Introductory Biology I). And, as Biology comes off of impaction and increases enrollment again, it is clear that even the current spaces will not be adequate. As such, we agree that the inclusion of new large (300+) spaces in the design of the new building is critical.

In the last two years, we have more than doubled the number of sections of BIOL 211 and BIOL 213, which are both laboratory courses for pre-nursing majors. As a consequence, we have now reached full capacity as the rooms used for these labs are being fully deployed from 8 AM until after 8 PM on all weekdays. Thus, we agree with the external evaluators that the renovation of Hensill Hall 116 will be necessary to meet the demand for our non-majors laboratory offerings.

4.5. We recommend that the Department and College work together to develop gathering spaces for students, faculty and staff to develop community.

In addition to instructional spaces, we are in dire need of gathering spaces. Right now, Biology students have no places to gather aside from the library. In keeping with recommendation 4.5, we specifically

propose that the new Science Building house a gathering space for students, faculty, and staff, which will be flanked by the CoSE Student Success Center, the Student Enrichment Office, the Pre-Health Planning Center, and other relevant offices that focus on student success.

Curriculum

4.7. We recommend that the Undergraduate studies division work toward development of a curriculum map for undergraduate programs to understand the role that each course in the curriculum plays in addressing program learning outcomes.

4.8. We recommend that, upon completion of a curriculum map, Undergraduate Studies works toward the development of a sustainable assessment plan that addresses each of the core concepts and competencies from Vision and Change that have been adopted by the Department.

The Department recently approved a massive curricular overhaul of the BS majors. We are now in the process of defining the role that each course in the curriculum plays in our departmental program learning objectives. We are also working on developing assessments that will allow us to measure student learning with respect to our program learning objectives. One idea that we have would be to work with Academic Technology to leverage the Student Evaluations of Teaching Effectiveness system for use in our Departmental assessment. By strategically inserting assessment questions into course evaluations for early, mid, and late career students, we expect to be able to track student learning over time.

Bylaws

4.2 We support the Department's effort to work toward development of Departmental by-laws to clarify working relationships within the existing governance structure.

We appreciate the need to have departmental by-laws. The Strategic Planning Committee has been tasked with drafting our first ever by laws in Spring, 2020. These by-laws will be developed with an eye on promoting the inclusion of lecturer faculty and staff in Departmental governance.

Housing subsidies

4.13. We recommend that the University consider financial support for faculty for housing given the high cost of living in the San Francisco Bay area.

We couldn't agree more. We would like to extend this idea to include staff as well as faculty.

Medium Priority

Coordination of Student Success Programs

4.1 We recommend that the existing equity programs that are associated with Biology (and the College) clarify their relationships to better articulate overlap between programs and prevent the development of "silos".

We fully agree with this assessment. The Chair will facilitate at least one meeting with the leaders of the student success programs each semester. To the end, the Chair has already begun to meet with the leaders

of the grant funded “equity” or “student success” programs to identify issues that the group can collectively address.

Advising

4.4. We recommend that the Department and College work together to expand the current student success center through the development of strategic priorities for the center.

The Department is very much in favor of this. Two strategic priorities that we are most interested in advancing are 1) the development of a clear structure for pre-health advising and 2) the establishment of a mechanism for students to get career advice from alumni.

4.3 We recommend that the Department consider mechanisms to ensure that faculty advisors receive training in empathy and mechanisms to ensure that students are aware of research and training opportunities.

The Department will continue to offer faculty development around advising during regularly scheduled department meetings. The leaders of the “student success” programs will tackle the development of better mechanisms to disseminate information about research and training opportunities to students.

4.12. We recommend that the University review the processes used for course equivalencies, substitutions and exceptions to prevent unnecessary paperwork for faculty and department chairs.

We understand that there will be a new paperless mechanism for dealing with course equivalencies, substitutions, exceptions, and graduation applications will be coming on line soon. We are thrilled by this prospect.

Graduate Community

4.6 We recommend that the Department work with the graduate students to revitalize the graduate student association in order to develop community among the graduate students.

The Department currently interfaces with two active student clubs, SACNAS and BE-STEM. Both of these clubs include both undergraduate and graduate students.

To address this recommendation, the Graduate Affairs committee will work with graduate students to envision the role of a possible new graduate student association.

Low Priority

Security and Maintenance

4.18. We recommend that the University review the security concerns expressed by students, faculty and staff in Hensill Hall, particularly those around theft and potentially people living within the building.

4.19. We recommend that the University Facilities Management team address basic custodial service and deferred maintenance issues in Hensill Hall to ensure that facilities are clean and safe.

4.9 We recommend that the Department, College and University consider the facilities, resource allocations and maintenance costs associated with the Estuary and Ocean Science Center in Tiburon in order to develop a sustainable program that uses these spaces.

Like many facilities on campus, Hensill Hall and the greenhouse facility has significant issues around security, basic custodial service, pest control (roaches and mice), and maintenance. All of these issues further contribute to the decline in morale amongst faculty, staff, and students.

The Biology Department is fortunate to have 4 faculty who are jointly appointed with the EOS Center. In addition to teaching on the main campus and at EOS, these joint appointments have labs and research programs that are housed at EOS along with those of other faculty from across the College of Science and Engineering. Although we have made informal agreements with EOS about shared resources, decisions are made at the College or University levels and Biology is typically not involved in these conversations. Having said that, we are happy to participate in as much as the College and EOS would view it as being useful.

In sum, we are in full agreement with the recommendations of the external reviewers and look forward to working with the College and the University to implement these recommendations.

Sincerely,



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Courage • Life of the Mind • Equity • Community • Resilience