

Program Performance Review: Culmination Meeting Memo
Department of Biological Sciences
Biological Science BS & Biology MS

The 2024-2025 Program Performance Review (PPR) process for Biological Science BS and Biology MS program in the College of the Natural Sciences and Mathematics (NSM) concluded with a culmination meeting on October 17, 2025.

The following people attended the meeting: Amir Dabirian (Provost), Marie Johnson (Dean), Marcelo Tolmasky (Department Chair), Sean Walker (Deputy Provost), Greg Childers (Assistant Vice President for Undergraduate Studies and General Education, AVPUSGE), Aimee Nelson (Executive Director for Graduate Studies, EDGS), and Su Swarat (Senior AVP for Institutional Effectiveness and Planning, SAVPIEP).

The Provost congratulated the program for completing the PPR process and thanked the department leadership for all the hard work over the past several years. Housing one of the largest programs at the university, the department is pivotal to the university's success. The following specific accomplishments were highlighted during the PPR process:

- The department's mission aligns with the university and college's goals and maintains a curriculum that is up to date with advances in the discipline.
- The faculty and the department are committed to student success and support a variety of pedagogical practices to support students, such as integrating research and teaching into the curriculum, providing experiential learning opportunities for students to engage in research, mentoring students, and a variety of evidence-based programs that decrease equity gaps.
- Despite many transitions and changes (i.e., COVID, leadership changes), the department has been able to adjust to meet needs and continue supporting students quickly.
- The undergraduate program was revamped to increase access to courses and better support student success (i.e., changes made with BIOL 251 and BIOL 252, new concentrations, virtual laboratory/online sections), key efforts to decrease time to graduation.
- The department staff play a key role in supporting students and the success of the department's efforts.
- The department has strengthened undergraduate advising efforts, providing students with opportunities for support throughout their academic journey.

Major recommendations and issues raised through the PPR process were discussed as follows:

1. Curriculum update:
 - The department and the external reviewers raised the need to continue to review the curriculum in support of student success (e.g. identify bottleneck courses, consider prerequisites, enhance consistency across concentrations).
 - The Chair reported that the curriculum changes are ongoing, to ensure course availability with limited resources. One example under consideration is a split between BIOL 151 and 152 (lecture and lab).
 - The Chair also reported that the department is prioritizing the consolidation of cell biology and molecular biology concentrations, which would help ensure more consistent course offerings.

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- The SAVPIEP asked about retention in the major. The Chair acknowledged the need to address how to retain students beyond lower-division courses.
2. Undergraduate research:
- The external reviewers recommended the department to continue to provide innovative educational opportunities (i.e., micro credential curriculum, iPROSPR program, experiential learning) that support student success.
 - The Chair concurred with the importance of student research and advocated for incorporating research into regular curriculum. The department has grant-funded programs that provide excellent research opportunities to small groups of students, but to have impact at scale, the department should continue adding classes or exploring relevant strategies to incorporate research in class.
 - The Provost commented that undergraduate research is aligned with the new CSU student success framework and encouraged the department to explore options.
3. Graduate program enrollment:
- The external reviewers recommended the department to increase enrollment for the graduate program while considering available resources and support from faculty advisors.
 - The Chair stated that ideally, the MS program should have 50-75 students; More tuition waivers are needed to increase graduate enrollment.
 - o The EDGS supported the idea, stating that graduate students who serve as TAs can help alleviate faculty workload; Even with tuition waivers, the cost of TAs are still cheaper than part-time faculty pay.
 - o The Provost acknowledged the need and agreed to work with the university central budget office to gradually increase the number of tuition waivers.
 - The Chair also noted the need to help students understand that the MS program is a 2-year full-time program, and as such, part-time students will take longer to graduate.
 - o The EDGS recommended the program to share detailed information regarding curriculum requirements, research expectations, etc. through the application process, emphasizing that the MS degree requires both coursework and research.
 - The EDGS inquired about the possibility of blended 4+1 programs.
 - o The Chair agreed it is a good idea and stated that some students are already doing it without the official structure.
 - o The Deputy Provost also recommended the department to consider direct admission from the BS program to the MS program.
4. Resource, faculty, and staff needs:
- The PPR process identified the need for more and better space and facilities.
 - o The Chair stated that more lab space is needed to support both instructional and faculty research needs, which hopefully will be made available in the new science building (proposed).

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- The Provost shared that the building proposal is in the queue with the CO and remains hopeful that it will be approved given the university's growing enrollment.
- The Chair asked for more staff positions to help prepare for lab courses, which are essential for a high-quality biology program.
- The Chair reported that the department has lost some faculty due to departures or FERP, especially in the areas of cell and molecular biology and plant biology. The department is in the process of determining exact needs to advocate for in subsequent hires.
- The Chair also stated the need to increase O&E budget, which has not been increased to accommodate growing enrollment. The department has been dealing with growing demands with limited funding, which is not sustainable.
- The Provost acknowledged the needs and agreed to work with the Dean's office to explore options.

The Provost concluded the meeting by thanking the department faculty and the department and college leadership. He encouraged the department to continue the excellent work and stated that he will advocate at the university level for increased space and resources.