

Post-APR Action Plan - Department of Biological Sciences				
Recommendation	DEPT. ACTION	COLLEGE ACTION	PROVOST'S OFFICE ACTION	Action Plan
Faculty and Research				
Increase the number of tenure-track faculty		X	X	<p>Dept: In order to manage the sustained increase in BIOL majors, TT faculty should increase to approximately 30 in the next 7-10 years to equal the number the department included at its largest.</p> <p>Dean: The college has developed a 10-year hiring vision that includes both replacement and expansion. Two additional faculty hires in FY17 and another for FY18 have been approved.</p>
The faculty should develop a multi-year vision and hiring plan to increase research prominence and enhance graduate recruitment	X			<p>Dept: The department faculty will develop a vision for the next decade, identifying areas of research and pedagogical strength to be enhanced and will develop a ten-year plan for new hiring (to accomplish the recommendation above.)</p> <p>TIMELINE: Currently ongoing</p>
Release the department from repayment of the remainder of its long term debt		X		<p>Dept: The remaining long term debt (\$200,000) should be forgiven to allow the department to mobilize resources to accomplish the other goals of the APR. Dean: The \$200,000 long term debt has been paid by the college.</p> <p>COMPLETED</p>
UMBC should develop a hiring plan to ensure a regular flow of new faculty and a financial plan to increase support of start-up funds		X	X	<p>Dept: The department can contribute as before but UMBC needs to find ways to increase start-up funding to ensure we remain competitive for the best candidates.</p> <p>Dean: See comment above.</p> <p>Provost: Will consider Dean's hiring priorities requests through the established budget process.</p>
The department chair should improve his feedback system to inform faculty of their progress to meeting performance expectations	X			<p>Dept: The chair will work with the faculty to develop a formal mechanism to solicit from each faculty member plans for each academic year and review their progress toward accomplishing these plans at each year's end</p>

Graduate Program				
Increase graduate student support on research grants	X		X	Dept: The department will intensify efforts to help faculty obtain research grants focusing on peer-mentoring, formal training (at UMBC and externally). The Provost will encourage the Vice President for Research to expand training programs and increase availability of seed funding.
Reduce guaranteed TA support to one line for faculty without recent history of substantial funding	X			Dept: Faculty who have had no substantial funding (at or above department average) for the previous three years will be reduced to one TA line. TIMELINE: AY 17-18
Require all submitted research grants minimally to cover graduate student summer salaries	X			Dept: To increase competitiveness in recruiting graduate students, the department will allow students to receive up to 1/3 above the current support level during the three summer months; all research grants should include funds for at least this level of support. The Department will emphasize benefits package in marketing strategies.
Encourage graduate students to apply for federal pre-doctoral fellowships	X			Dept: The department will inform students of these opportunities and provide training in grant writing (as part of the first-year curriculum) to new students; more senior students will be provided training if necessary.
Decrease the number of TAs to one in each laboratory course	X			Dept: Currently, two TAs are present in each lab class; this will be reduced to one to enable more TAs in lecture classes. TIMELINE: Department is considering this change
Establish formal, graduate classes in all relevant disciplines or encourage students to take appropriate classes at other USM institutions	X			Dept: Students currently take graduate classes cross listed as undergraduate classes; the department will develop graduate-only courses to the extent possible with available staffing and will exploit courses at UMB or UMCP.
Reduce the years of guaranteed departmental support to graduate students and implement means to accelerate their progress to	X			Dept: Currently students are guaranteed six years of support with a possible seventh; this will be reduced to five with a possible sixth; to improve progress, the department will decrease the number of required rotations, enforce and expand oversight of student progress and establish clear milestones for progress to the PhD.

completion				Timeline: Begin in Fall 18
Re-evaluate first-year course sequence focusing on professional development	X			Dept: The current required first-year BIOL 700 course will be re-evaluated to ensure a state-of-the-art curriculum for professional development. TIMELINE: Fall 18
Improve the culture of research presentations by graduate students	X			Dept: Currently, students in their 4th year present to the entire department; this will be expanded to a regular, yearly set of presentations to peers and mentors in the second and third years; more formal oral presentations will be included in the annual Graduate Association of Biological Sciences (GABS) Symposium. The department will encourage attendance at Graduate Research Conference (GRC).
Undergraduate Program				
Increase student laboratory fees to support maintenance, repair and replacement of equipment	X			Dept: The department will request that the laboratory fees be increased from the current \$50 to \$100 per course for laboratory classes and the increased funding used for these purposes. The department will do a cost analysis, and request for justification will be brought forward for Dean's Review.
UMBC should make a one-time contribution to update laboratory equipment		X	X	Dept: Teaching Laboratory equipment being seriously out of date, UMBC should provide funding for replacement of critical equipment and purchase of equipment representing cutting-edge technology. Dean: Core facilities have been established to provide state-of-the-art equipment. The ILSB equipment budget should further enhance our research equipment profile.
Hire more professional advisors to reduce advising burden on faculty		X		Dept: Biology faculty currently advise in excess of 50 students each; to reduce this to a more manageable number one or two more advisors should be hired. The department will consider group advising and other strategies. Dean: The college has established a Science and Math Advising Resource Team (SMART), under the directorship of Michelle Bulger. This structure allows for expansion of the advising staff to accommodate a growing student population. The Dean will help facilitate a conversation with Chemistry/Biochemistry to shift some of the advising load when their loads are lighter.

To assess the success of the 2010 curriculum changes (especially emphasizing the BA) career outcomes data should be collected	X			Dept: The department tracks some career outcomes as part of the MARC program; this tracking will be expanded to include as many BS and BA graduates as possible
Facilities and Infrastructure				
Formalize Interdisciplinary Life Sciences Building (ILSB) occupation to allow departments to plan hiring in the new high- quality space		X	X	Dept: The mechanism for filling the ILSB space is not completely set but some faculty will initially occupy ILSB space; how space will be allocated should be formalized with the departments. Dean: Initial occupants will occupy the ILSB and provisions are being made for departments to utilize space. Provost: Guidelines for research space allocation are being developed.
Make renovation of Schwartz Hall an institutional priority			X	Dept: The laboratories in Schwartz Hall were considered to be very inadequate; along with the need to renovate the defunct animal facility, a thorough renovation of Schwartz Hall is warranted. Provost: The Provost will investigate and make decisions through the established process; the reassessment will provide the chair and faculty a timeline and concrete information.
Ensure post-award staff are sufficient in number and adequately trained			X	Dept: The frequent turnover of Office of Sponsored Programs staff threatens ongoing research programs; UMBC should make it a priority to maintain staffing of adequately trained personnel to manage post-award accounting
Maintain and enhance efforts to recruit diverse faculty and graduate students	X	X		Dept: The department is well-positioned to continue to recruit diverse faculty with their recent success with the Pre-Professoriate Postdoctoral Fellows program but this effort should be continued in all new faculty hires; recruiting diverse graduate students has been a priority but efforts must be continued toward that goal. Dean: The college supports all efforts by the department to recruit (and sustain) diverse faculty and graduate students.
Responses to Department Proposed Future Directions				
Consider analyzing resources necessary and demand for course-based research instruction (CRE)	X			Dept: Formal assessment should be done of the costs in personnel and money for these courses as well as canvassing students to determine their level of interest in these advanced laboratory classes

Consider analyzing the need for and resources necessary for a formal Undergraduate Learning Assistant (ULA) training course	X			Dept: Formal assessment should be done to determine whether this course would reduce effort, improve teaching effectiveness, and/or fill gaps in the curriculum
Consider establishing goals for the proposed Center for Training in Biology Education	X			Dept: Clarify the role for such a center and clarify what currently unachievable goals would be met by establishing it
Consider establishing research centers focusing on Biology research	X			Dept: Centers of this type help build research excellence and can increase visibility; one center is being actively organized and a efforts to establish a second should begin as soon as possible
Consider having graduate students develop Individual Development Plans (IDPs)	X			Dept: IDPs would help students to prepare for career paths, both traditional and alternative; the Graduate Committee should formalize this process including training students in creating them
Consider creating first-year techniques mini courses	X			Dept: The visiting committee did not support this initiative; if implemented, the faculty would have to deal with problems such as how such courses would serve students with diverse interests because a one- size-fits-all approach cannot provide relevant training to all students; the committee recommended a “open lab” environment where students could meet to collaborate and share expertise; the department should investigate the feasibility of such an approach