Plant Pathology
Implementation Plan Report FY 2020
Based on 2015-2016 Periodic Program Review

1. Create two new Regular Title Series tenure-track faculty lines in the department.

See FY 2019 report.

Ongoing improvements: Recurring funds for the two new tenured faculty members have not yet been established. Additionally, the department still considers it a priority to recruit an additional faculty member to broaden its research and instructional base, if funds can be identified for the purpose.

2. Identify relevant laboratory space for the new faculty hires

Assessment Method: Change in laboratory square footage available, and in quality of the facilities.

Results: The five Extension title series faculty members have had a significant increase in quantity and quality of available laboratory space. Three Extension faculty members in the Lexington campus share a laboratory in the Plant Sciences Building (PSB), which was expanded by converting half of the adjoining room from office to laboratory space, with the desks replaced by laboratory benches. The result was an increase from 435 sq. ft. to 725 sq. ft., a 67% increase. On the Princeton, KY campus, with the development of the Grain and Forage Center of Excellence at UKREC, the facility has undergone a major renovation. There, the space dedicated to Plant Pathology (two Extension faculty members) remained the same but was overhauled and upgraded. Furthermore, with the provision of a shared molecular biology laboratory shared with other departments, the available space for the Plant Pathology programs has effectively increased by approx. 50%.

Analysis of results and reflection: Progress has been substantial for the five Extension title series Faculty Members, but the situation has not improved for the eight Regular title series Faculty Members.

Ongoing improvements: Regular title series faculty members continue to struggle to find adequate space for their programs. This is a continuing priority consideration in the Chair's discussions with the College Administration.

3. Provide startup funds for the new faculty hires, including adequate funds for major equipment.

See FY 2017 report.

Ongoing improvements: Whenever a new faculty line is approved, funds must be identified at the College and University levels to provide competitive start-up resources commensurate with the nature of the position.

4. Replace plant growth chambers with current, more efficient models, particularly in the containment suite.

Assessment: Availability of growth chambers to accommodate the needs of research and extension (applied research) programs.

Result: This goal has been met (see FY 2016 report). In addition, a previously nonfunctioning walk-in chamber in PSB was repaired in 2020.

Ongoing improvements: Although the recent addition of three chambers has addressed this goal, as other growth chambers age they will need to be replaced. The suite of containment chambers in the Plant Sciences Building is now 15 years old, and their replacement should be considered if funds can be identified.

5. Avail institutional resources that have been implemented to help increase applications from traditionally underrepresented minorities.

Assessment: Staff members, faculty members and students from traditionally underrepresented minorities.

Results: Two of the four office staff positions became vacant. One was filled by a Black Female, and the other was filled by a White Female. Additionally, of the three domestic students (U.S. nationals), admitted to the degree program one is a Black Hispanic Male, one is a White Female, and one is a White Male.

Analysis of results and reflection: The recruitment of a Black Female to the office staff is obviously a positive move toward the goal of parity for underrepresented minorities. Further movement in that direction has been impeded by low turnover in staff positions and by insufficient availability of qualified minority applicants for vacancies in technical staff positions. The latter problem relates to the relatively low number of trainees regionally and nationally in the appropriate disciplines, particularly at Masters and Ph.D. levels.
Current demographics of Faculty Members are close to parity with several groups: 36% female, 7% African-American, 14% Asian American. Among underrepresented groups, no Hispanics are on the faculty.

Ongoing improvements: The Department is committed to enhancing diversity among faculty, staff, and students, and our recruitment efforts have been successful indeed in establishing or maintaining parity of traditionally underrepresented minority students, as well as female students, in the graduate program.

6. Develop a comprehensive graduate student orientation program for both domestic and international students.

See FY 2017 report.

Ongoing improvements: The department faculty have been encouraged to structure courses and research activities early in their students' programs to utilize and thus reinforce the skills taught in PPA 784.

7. Promote an active social committee to foster interactions among all members of the department.

See FY 2017 report.

Ongoing improvements: With the many professional and personal demands on the time of all members of the Department, it is difficult to envisage increasing social activities. Members of the department continue to be encouraged to participate. The Student/Postdoc organization (Association of Plant Pathology Scholars) continues to be very active.

8. Develop plans to promote travel to professional meetings by all graduate students in the department.

Assessment Method: Proportion of PPA Graduate Students attending and presenting at scientific meetings each year, and number of meetings and presentations by each student.

Results: In the past year 11 Graduate Students attended a total of 17 national or regional meetings. Students advised by Faculty Members in Extension title series have also been attending and presenting in extension meetings and events.

Analysis and reflection: This year's student attendance of scientific meetings represented approximately double that of the previous year. This is a major positive trend.

Ongoing improvement: Nearly all faculty advisors have had students attend meetings. There is still some room to expand participation, so the students and their advisors continue to be encouraged to identify appropriate meetings, to plan for student presentations at meetings, and to utilize block grant funds to help defray the costs.

9. Examine new sources of funding to support in-state travel for extension faculty and develop plans with the Associate Dean for Extension to adequately fund the extension programs within the Department.

No progress to date. To be addressed again in 2020.

10. The Department should discuss with the college administration possible financial support for undergraduate research projects, where such support can aid in graduate student recruitment directed towards underserved minorities.

No progress to date. To be addressed again in 2020.

11. Encourage Faculty to take sabbatical leaves to improve their skill sets and refresh their perspectives on their careers.

Assessment Method: Numbers of Faculty Members considering and taking sabbatical leave.

Results: One faculty member took a year-long sabbatical funded by the Jefferson Science Fellow program of the Department of State and US-AID. This was achieved through a highly competitive application process.

Analysis of results and reflection: Faculty sabbaticals in this department have been far less frequent than the traditional once in seven years, largely because of family reasons.

Ongoing improvement: Difficulties in taking sabbaticals were discussed in a faculty meeting, and almost always have to do with family obligations. A recent sabbatical in another U.K. department (Computer Sciences) was described as extremely useful, so that is an option that more faculty might consider.

12. While the need for additional space may result in a college level analysis of space allocation, every effort should be made to keep the Plant Pathology research and extension faculty in the Plant Sciences Building.

See FY 2018 report.

Ongoing improvement: As the Department grows, discussion continues with the CAFE Administration to keep the physical coherence of the unit.

13. Not applicable; Original suggested goal was rejected.

14. Increase Master's Program degrees conferred.

Assessment Method: Track numbers of students enrolled, and degrees conferred in the Plant Pathology Master's Program over a five-year period. The target is three degrees per year beginning in 2021, resulting in 15 degrees produced over 5 years by 2026.

Results: The Department implemented a Plan B (non-thesis) M.S. program. The proposed curriculum was approved at all levels. Four M.S. students were enrolled in the M.S. program during the academic year 2019-2020. One of those completed the M.S. degree. In Fall 2020, another is expected to complete the M.S. degree, and a new student is expected to enroll in the M.S. program. All of these students are or will be in the Plan A option.

Analysis of results and reflection: The availability of a Plan B M.S. degree option is expected to increase applications and enrollment in the Plant Pathology M.S. program. Although the target of three new M.S. students per year has not yet been achieved, there is steady demand from qualified students to enter the Plant Pathology M.S. program. Despite the COVID-19 pandemic new enrollments are holding steady. The expectation is that the numbers will increase when the pandemic abates.

Ongoing improvement: The department continues to reach out to prospective applicants who may be interested in the M.S. plan A or plan B option. A 4+1 program in Plant Pathology is also under consideration.