

**Louisiana State University  
College of Agriculture  
Department of Plant Pathology and Crop Physiology**

**Flagship Agenda**

**MISSION STATEMENT**

The mission of the Department of Plant Pathology and Crop Physiology is to enhance Louisiana agriculture by providing economically sound, environmentally safe, socially acceptable solutions to problems associated with plant pathogens and physiological limitations that can be implemented through extension outreach programs; to make contributions to the scientific disciplines of plant pathology and crop physiology, and to provide training and instruction of the highest quality to students so that they can become independent scientists prepared to embark on individual careers.

**DEPARTMENTAL GOALS**

1. Conduct research that will benefit the agricultural industries of the state, nation and the global community and make contributions to the disciplines of plant pathology and crop physiology.
2. Provide courses and training necessary to support comprehensive curricula in Plant Health with emphasis in plant pathology and crop physiology that will allow students to achieve their highest levels of intellectual and personal development.
3. Enhance extension outreach programs to provide user groups with current and objective research information and solve problems affecting agricultural and urban communities.

In order to meet the objectives of Louisiana State University National Flagship Action Agenda, it will be necessary to interface the listed departmental goals into these objectives.

**Objective 1. Increase Research Productivity and Long-term Economic Development.**

Suggested Actions in the agenda document include:

- increase in laboratory space
- increase in library acquisitions
- support PK-12 teacher reform

Departmental response to suggested actions include:

- immediate increase in research/teaching/extension faculty positions with appropriate support staff to compliment scientists. This department has suffered a

near 50% reduction in faculty rank positions over the past decade due to financial constraints. In order to reinvigorate the department, an immediate addition of two faculty level positions (with support staff) should be implemented. One should be added in 2003, another in 2004 and two additional positions by 2010.

- The number of graduate assistantships should be increased to a level that each scientist is able to best utilize his individual talents in graduate education. The department should add two post-doctoral scientists in the next fiscal year (2003-2004). An increase in post-doctoral scientists provides not only an economical means of increasing scientific productivity, but also valuable training for young scientists prior to the beginning of their own independent careers. Appropriate funding must be made available in these critical personnel areas. Initially, funding for two post-doctoral positions would come from grant funds (2003-2004). Hard money (state/federal funded) post-doctoral positions should be added as funds become available.
- Laboratory space in the department of Plant Pathology and Crop Physiology is outstanding. Having recently expanded into the Life Sciences Annex Building, there is no shortage of exceptional laboratory facilities for the current faculty. Addition of new faculty, graduate assistants and post-doctoral scientists will require funding to equip these labs for additional program areas. It will be necessary to add one faculty member immediately in the area of small grains pathology (genetics component) and a second in the plant disease diagnostic area. The increased emphasis on agrosecurity and disease monitoring and detection may open avenues for funding from special state and federal sources.
- There is always a need for maintaining and increasing library acquisitions in Plant Pathology and Crop Physiology.
- Support for PK-12 teacher reform needs to be extended through undergraduate education. The department of Plant Pathology and Crop Physiology is primarily involved with graduate education. It is imperative that a balance of foreign and domestic students be maintained. The Department of Plant Pathology and Crop Physiology is currently involved in the undergraduate program through a curriculum in Agricultural Pest Management. Increased student participation should be encouraged through rigorous recruiting efforts at the high school level.

## **Objective 2. Increase quality of undergraduate student body**

Suggested actions include:

- Increase undergraduate admission standards, more competitive admissions model.
- Increase the diversity and cultural awareness of LSU students.
- Increase recruitment, orientation and retention of transfer students.

Departmental response to suggested actions:

- The Department of Plant Pathology and Crop Physiology is primarily a graduate department. Our involvement in the undergraduate program is limited. These areas can be best addressed by departments primarily involved with undergraduate education.

### **Objective 3. Increase number and quality of graduate students and programs**

Suggested actions include:

- Increase total number of high quality graduate students in key fields.
- Increase quality and competitiveness of graduate programs through targeted investments and systematic program review.
- Increase diversity of graduate students and faculty.

Departmental response to suggested actions:

- Total number of quality graduate students could be increased with increased availability of graduate assistantships. In order to continue to attract high quality students, we must be competitive with peer universities, particularly in the Southern Region.
- Increase funding for necessary upgrade and replacement of cutting edge equipment is critical. The plant sciences are undergoing rapid and frequent changes in techniques and methodology, particularly in relation to diagnosis and identification of plant pathogens. In order to keep up with changes, we must have the necessary support.
- The department will continue to recruit the highest quality graduate students and faculty, regardless of ethnic origin or background.

### **Objective 4. Improve quality of campus life.**

Suggested actions include:

- Increase effectiveness of programs and services that support faculty, staff and student success.
- Increase quality of environment for working, learning and living.

Departmental response to suggested action.

- The department has a history of student success. Retention of faculty has been poor in the past decade due to poor salary/support situation.
- Addition of new Life Sciences Annex has greatly improved the quality of the working environment for faculty, staff and students.

### **Objective 5. Communicate opportunities and impact of programs.**

Suggested actions include:

- Identify and update primary sources of information regarding faculty, student and staff success.

- Assess LSU's image and address areas of concern.
- Identify and invest in opportunities to educate national organizations or news sources on LSU's progress.

Departmental response to suggested action:

- The department needs to improve use of the internet, primarily in the dispersal of information important to clientele. Current dispersal of success is inadequate.
- The department's image is in need of a "makeover". This could best be accomplished by the addition of new faculty (which would invigorate not only the faculty, but the graduate program in general).
- The department faculty utilizes professional society affiliations to disseminate information on successes in the scientific arena.

### **Objective 6. Increase funding sources to support Objective 1-5.**

Suggested action include:

- Increase federal, state, and private dollars used for campus renovations and new building initiatives.
- Increase state general fund direct support.
- Create targeted revenue streams for research from state and federal funds.
- Raise private funds to support undergraduate scholarships, graduate student stipends, and key academic initiatives.
- Increase tuition annually.
- Increase Academic Excellence Fee.

Departmental response to suggested action:

Only the areas of creating revenue streams for research from state and federal funds and raise private funds to support programs are departmental functions. The other actions are administrative in nature and better left to Deans, Chancellors, etc. The departmental faculty continues to attract funding from regional, national and private interests to subsidize ongoing research and education programs.

### **COURSE OF ACTION**

**Departmental Goal 1.** Conduct research that will benefit the agricultural industries of the state, nation and the global community and make contributions to the discipline of plant pathology and crop physiology.

Responsible parties – Administration, Department Head, Faculty

Needs to accomplish goal – Add faculty positions in key areas; secure additional resources; add support personnel; increase current faculty salaries; mentor new faculty; participate in professional society; attend workshops, seminars, training programs and sabbaticals.

Indicators of performance – Faculty make-up and number; grant funding level; post-doc, graduate assistant and support staff numbers; salary survey results; annual evaluation of activities.

**Departmental Goal 2.** Provide courses and training necessary to support comprehensive curricula in Plant Health, with emphasis in plant pathology and crop physiology that will allow students to achieve their highest levels of intellectual and personal development.

Responsible parties – Department Head, Faculty, Courses and Curricula Committee, Graduate Advisors

Needs to accomplish goal – Periodic course review; SPOT evaluations; faculty workshops; professional society surveys; promotional brochures; recruitment visits; increase graduate assistantships; monitor and update Departmental Web page; Exit interviews and surveys.

Indicators of performance – Student enrollment; evaluation results, survey results; assistantship levels and numbers; workshop participation; job placement of graduates.

**Departmental Goal 3** – Enhance extension outreach programs to provide user groups with current and objective research information and solve problems affecting agricultural and urban communities.

Responsible parties – Department Head, Faculty

Needs to accomplish goal – Program development, implementation and evaluation; written and electronic communication; contact documentation; clinic sample numbers and type.

Indicators of performance – evaluation of program; publications, meetings and contacts with County Agents and producers; sample process results delivered.

Constraints to accomplishing any/all of these goals is a lack of necessary funding.