

**University of Guelph**

**Department of Plant Agriculture**

# **Strategic Plan 2006-2011**



## **PROLOGUE**

The Department of Plant Agriculture's Strategic Plan is an evolving, working document. It was produced by an on-going, grass-roots initiative of faculty and resulted from a sharing of their insight, foresight, and guidance.

We, the members of the Department of Plant Agriculture, are committed to, and focused on, our vision. The goals and objectives outlined in this document are our roadmap towards achieving that vision. We are, therefore, equally committed to the strategic goals and objectives described herein. Our group also understands that conditions and circumstances change, as can the issues we face, and needs of the society we seek to serve. We recognize that we must continually re-examine our goals and objectives and revise them in order to achieve our vision.

## INTRODUCTION

The heritage of the Department of Plant Agriculture dates back to 1874 with the founding Departments of Horticulture and Agriculture in the Ontario Agricultural College, and to the Horticultural Research Institute of Ontario, founded in 1906. The Department, whose foundations are deeply established in crop science and horticultural science, has an unparalleled legacy of contribution and service to society through its research, innovation and education in plant agriculture, here in Ontario, across Canada, and around the world.

The Department recognizes its special obligation to address questions and problems in the agricultural sciences. We view ourselves distinct from a plant biology department because, as a group, we seek not only to make basic discoveries in our disciplines, but also to apply knowledge for the direct benefit of society.

The needs of society, however, are evolving rapidly with unprecedented complexity, and society's implicit expectations of agriculture are also changing. The Department recognizes that society's needs and concerns, which have traditionally focused on production agriculture, food abundance, and affordability, have rapidly evolved to include consumer life-style choice, environmental sustainability, food safety, climate change, urbanization, alternative energy, resource renewal, and globalization. Part of our strength is our diverse expertise and facilities for addressing these shifting needs and concerns.

Meeting society's needs and expectations requires vision and strategy. In May 2005, the Department undertook an initiative to redefine its vision. A faculty survey provided a picture of the organizational culture of the Department and identified opportunities for building trust and openness among its members. A one-day retreat allowed faculty to provide input into developing the Department's vision and to prioritize critical and strategic issues.

With the extensive input and insight gained from that retreat, we developed a new and enduring vision for the Department. A second half-day retreat with the faculty then focused their input and insight on strategic issues, goals and objectives relevant to the new vision.

The Department's Strategic Planning Committee began to develop a 5-year Strategic Plan to move the Department toward its vision. Based on input from faculty, three critical, overarching questions emerged in the context of the new vision and the strategic plan to achieve that vision:

- 1) How do we master the ability to understand society's needs, develop innovative strategies to address those needs, and so produce the quantum leaps of knowledge that will redefine the disciplines of plant agriculture?
- 2) How do we revitalize our undergraduate program to best meet the evolving educational needs and expectations of society, thereby stabilizing enrolment in courses and majors and ultimately attracting increased numbers of high-quality students to our Department?
- 3) How do we maintain our deeply valued tradition of internationalism? How do we offer our expertise effectively to improve quality of life around the world and maximize our opportunities to learn lessons abroad that can be applied here, to create value for society?

A second, extensive survey gained the insight of faculty on these overarching questions and sought input in relation to strategic goals and objectives that could move the Department closer to its vision. Two strategic goals and nine highly ranked, clearly supported objectives by which to achieve those strategic goals emerged from the survey.

The Vision and Strategic Plan are, together, a culmination of extensive faculty input. They result from a truly “grass-roots” effort to define an enduring vision for the Department and build, from the bottom up, a Strategic Plan that will align our people, our culture, and our expertise in order to achieve our vision.

## **OUR VISION**

Our Vision is based on: 1) a Core Ideology, comprised of our core purpose and core values, which we will defend and preserve without compromise; and 2) an Audacious Goal which we will strive to accomplish.

### **Our Core Purpose (core ideology)**

To improve life through innovative science and teaching

### **Our Core Values (core ideology)**

1. Honesty and integrity
2. Discovery and understanding through scientific methods
3. Innovation in research, education and service
4. Environmental stewardship and social responsibility
5. Fostering and protection of intellectual freedom

### **Our Audacious Goal**

To become the Department that redefines plant agriculture by taking it to new frontiers in science and society.

## STRATEGIC GOAL 1

### **Achieve a cultural transformation that allows our Department to redefine plant agriculture.**

Our view is that solutions to society's needs will involve an unprecedented complexity and require innovation and significant risk-taking. We believe that the first step in meeting this challenge is to achieve a cultural transformation in our Department that inspires innovation and fuels the tremendous potential of our graduate students to innovate. Furthermore, to redefine plant agriculture, our cultural transformation must establish shared leadership across faculty and recognize and reward teamwork, leadership and excellence.

#### **Objectives:**

#### **1. Inspire innovation by creating an environment for vibrant dialogue and exchange of ideas.**

1.1 Invite scientists and internationally acclaimed experts to our Department.

1.1.1 Develop funds to invite experts for short or long-term sabbaticals.

1.1.2 Initiate an endowed Seminar Series.

The Department will establish a campus-wide, multi-week life sciences Seminar Series to help to promote interdisciplinary training for University of Guelph graduate students. Ultimately this Series will extend through the fall and winter semesters.

Seminar series to commence in 2007.

1.2 Establish a yearly one-day interdisciplinary forum.

The forum will occur in cooperation with a "guest" department on campus e.g., Agricultural Economics, Food Science, Engineering, Land Resource Science, Integrative Biology, Molecular/Cellular Biology, Philosophy, etc.).

First forum to be held in 2007.

1.3 Establish the New Ideas Fund.

This modest Fund will cover expenses incurred with informal gatherings within the Department to share ideas, insights, and vision across labs and projects. Faculty and staff will be able to apply for \$100-\$200 per event for food, beverages, etc.

1.4 Initiate an Annual Retreat.

The Retreat will be a 2-day overnight event for all scientific members of the Department. The objective is to develop our skills in building trust and sharing ideas, and to debate key issues in the context of our vision.

First Annual Retreat to be held in 2006.

#### **2. Revise and enhance our graduate program.**

2.1 Develop and implement a process whereby Ph.D. students propose *high-risk, high-payoff* "side projects" as part of their graduate training.

The Graduate Committee will develop and implement by June 2006.

- 2.2 Introduce new elements to the graduate program that encourage and facilitate our students to become scholars in their broad disciplines, beyond the scope of their research projects.
- 2.2.1 Establish a core curriculum of courses to provide depth and breadth in our disciplines.  
Ensure that each graduate student gains breadth and depth through a “suite” of courses consistent with his/her discipline.
  - 2.2.2 Introduce a seminar/colloquium course in which each faculty member presents a 1-hour overview of his/her research program.  
The course will be mandatory for graduate students. Industry and grass-roots leaders may also be invited to present. Seminars will be promoted and opened to the public.  
This course to begin in 2007.
  - 2.2.3 Implement *weekly* graduate student seminars.  
The seminars will be promoted as department-wide events and may include thesis proposals, research updates, and new ideas as well as traditional seminars.
- 2.3 Establish a task force to develop strategies for increasing financial support for graduate students.  
Task force to be established by Department Chair in the first quarter of 2006.  
These strategies will:
- 2.3.1 Make graduate student stipends more internationally competitive.  
  
e.g., take advantage of potential Provincial funding opportunities to increase graduate student enrollment in Ontario universities, by proposing 1:1 matching funds.
  - 2.3.2 Establish a graduate student endowment along with sponsored scholarships.  
A plan to increase the recognition of donors (e.g., named corporate scholarships, website, plaques, logos) will be developed.
  - 2.3.3 Develop and launch a multi-media marketing package to promote the Department to potential donors.
- 2.4 Promote the Department by increasing its visibility and enhancing its public image.
- 2.4.1 Develop a multi-media and web-based marketing package to be deployed at national and international meetings and conferences (similar to 2.3.3).
  - 2.4.2 Upgrade the faculty website and use an internal search engine, alumni reports, suggested career opportunities and information regarding contributions to agriculture, society, and education.

### **3. Create an environment of shared leadership within the Department.**

- 3.1 Reform the process of Committee Assignments.

3.1.1 Implement an annual Faculty Interest Survey in which faculty and staff rank their interest in serving on our various committees.

3.1.2 Balance interest and expertise of faculty, maintain corporate history while enlisting the talents of new individuals, and familiarize young faculty with committee functions so they may become effective leaders in the future.

To be administered by the Department Chair using Faculty Interest Survey.

3.1.3 Balance workloads equitably to account for the time required for specific committee assignments and other responsibilities.

To be administered by the Department Chair.

3.2 Include committee annual reports on the agenda of the Strategic Plan Review.

The Review will promote accountability, increase recognition and enhance awareness of committees. Reports should focus on how committee actions align with our Strategic Plan and vision.

#### **4. Increase our organizational effectiveness.**

4.1 Revise P&T criteria by Fall 2006 to:

4.1.1 Reward innovation, encourage risk-taking, and permit failure in high-risk research.

Revise the P&T documentation to solicit explanations of risk, innovation and value implications.

4.1.2 Include a long-term (six year) research accounting in the biannual review to assess research focus and level of risk.

4.1.3 Use discipline-based journal impact factors to account for quality of research publications.

4.1.4 Require external letters for tenure and promotion.

4.2 Recognize and reward faculty leadership.

Significant leadership roles within the Department will be allocated time *in lieu* of other responsibilities (e.g., other committees, teaching) and recognized and rewarded in P&T review.

4.3 Initiate an annual Strategic Plan Review.

Conduct a 1-day faculty retreat to review progress in relation to our Strategic Plan and Audacious Goal. Incorporate feedback from all members of the Department (e.g., survey, meetings, first review to be held in 2006).

4.3.1 Re-examine goals and objectives and revise as necessary.

4.3.2 Provide objective assessment through working groups charged with reviewing progress toward each major objective.

4.4 Facilitate time to think, read and write across the Department.

4.4.1 Limit, in most cases, the number of faculty members per committee to four.

4.4.2 Minimize faculty meetings.

Hold meetings only when decisions must be made and use email to disseminate information.

4.4.3 Designate one weekday free of all scheduled Department activities.

For example, no seminars, thesis defenses, committee meetings, or comprehensive exams scheduled on Wednesdays.

4.5 Improve communication and stimulate interaction.

The Executive Committee will develop a strategy to facilitate communication and stimulate interaction among members housed in the Crop Science Building, Bovey Building and satellite campuses.

4.5.1 Develop video links between our sites to reduce faculty travel, improve communication and facilitate teaching (e.g., Bio-products infrastructure dollars).

4.6 Implement the annual Feed-Forward Workshop for staff.

The Workshop will enable staff to provide the Department with innovative ideas for improving the operations of the Department.

## STRATEGIC GOAL 2

### **Realign and revitalize our Department in order to enhance the value of agriculture to society.**

In order for the Department to reach its Audacious Goal, it must not only evolve with the changing needs of society, but also enhance the value of agriculture to society. We believe that the first steps are to discover and understand society's needs and to become leaders at identifying opportunities to create value in relation to those needs. This realignment and revitalization must strengthen our expertise, international research, and teaching.

#### **Objectives:**

**1. Discover what society needs from plant agriculture, educate ourselves to better understand the nature of value, and identify opportunities to create value through innovations in plant agriculture.**

1.1 Establish the New Frontiers Task Force.

The Task Force will consist of three faculty from Plant Agriculture and include representation from outside the Department, e.g., from other departments (an agricultural economist, a food scientist), industry leaders, leaders from other sectors, staff and graduate students.

The Chair of this Task Force will receive credit *in lieu* of other Departmental responsibilities.

1.2 The Task Force, established before the second quarter of 2006, will:

1.2.1 Launch the annual New Frontiers Symposium.

The Symposium will address the concept of 'value' as well as visionary and controversial topics (economics, industry, production, environment, policy and government, etc.) as a means of addressing the future of agriculture, and society's needs from plant agriculture. Guest speakers may include: CEOs of corporations, executive members of environmental organizations, NGOs, and special interest groups, economists, politicians, and government and policy specialists.

First symposium to be held in 2006.

1.2.2 Survey and analyze stakeholders to identify needs and opportunities for creating value through innovative research and teaching.

Survey to be completed December 2006.

Findings will be incorporated into a report presented to faculty, staff and grad students at the second annual New Frontiers Symposium.

**2. Align and strengthen our expertise in order to enhance the value of agriculture to society and to create value that meets or exceeds society's needs.**

2.1 Identify faculty "champions" to establish and lead multidisciplinary centres.

These centres of research and teaching should attract funding, and create novel synergies across disciplines to foster the research needed to meet the critical needs of society.

- 2.1.1 The leader of each Centre will develop a strategy to lobby for and win funding support. Initial funding support may come from an NSERC program, which helps to form research linkages.
  - 2.1.2 Centres will address strategic needs of science and society.
  - 2.1.3 Examples of possible centres include "Enhancing Farm Income," "Agriculture, Energy and the Environment" or "Urban Ecosystems".
  - 2.1.4 Centres may be multidisciplinary, cross-departmental and, where appropriate, multi-institutional.
- 2.2 Reform the faculty hiring process so that it becomes more closely aligned with the Vision of the Department.
- 2.2.1 Form an *ad hoc* Faculty Replacement Committee that will use the New Frontiers report to develop a plan for new, vacant and retiring faculty positions. It will apply the following criteria: short-term and long-term research needs and funding, interdisciplinary linkages, teaching needs, availability of facilities, and the vision of the department.
  - 2.2.2 The Committee will present options for a faculty vote, followed with a report to the Dean. If approved, appropriate Search Committees will be established.

**3. Transform the Plant Agriculture undergraduate curriculum to better meet society's needs, expand experiential learning and attract new students.**

- 3.1 Establish the Curriculum Transformation Task Force by May 1, 2006.

The Chair of this Task Force will receive credit *in lieu* of teaching.

The Task force will:

- 3.1.1 Be established by Department Chair in consultation with the Undergraduate Teaching Committee.
  - 3.1.2 Consist of faculty from the Department, those from other departments and other universities, representatives of primary producers, industry and other stakeholders.
- 3.2 The task force will make recommendations for new curricula, including innovative courses and programs, and core courses, by 2008. It will:
- 3.2.1 Seek input into the design of courses and programs from students, stakeholders, and faculty within and external to the Department, including faculty from other universities.
  - 3.2.2 "Reverse engineer" the new curriculum by starting not with existing courses and programs, but with perceived needs and work back to courses and programs.

- 3.2.3 Focus on 'hands-on' learning and laboratories and establish co-op programs and internships in industry, the public sector and other countries.
- 3.2.4 Present its report by mid-2007; new and revised course plans will be submitted by mid-2008. The BSc (Agr) Program Committee will be engaged throughout the process.
- 3.2.5 Foster the design of innovative courses to serve non-majors.  
These will be based on the passionate interests of individual faculty, noting that Arts students have a Science requirement:
  - 3.2.5.1 Courses may be designed and implemented in coordination with other departments from OAC and from other Colleges and Schools within the University.
  - 3.2.5.2 Potential classroom and distance education courses include: food safety, organic farming, enhancing farm income, agriculture and the environment, plant agriculture policy, plant biotechnology, ethical implications, urban agriculture, agriculture and health, industrial uses of plants, crop diversity, plants in religion, plants in art.
  - 3.2.5.3 New courses will be actively and innovatively promoted (e.g., advertised creatively in the *Ontarion*), on bulletin boards outside of our buildings, on the Plant Ag website.

### 3.3 Promote a new Expert-in-Residence program.

The program will provide real-world insights for our students, and will be a unique learning opportunity for these experts, who may include industry leaders, innovators and producers. Funds for this program will be sought from the University Priority Investment Fund by the Undergraduate Teaching Committee as a pilot program. A desk in the Department will be reserved for this purpose.

## 4. Promote the Department by enhancing the awareness of agricultural issues and plant agriculture education in high schools.

### 4.1 Establish the High School Outreach Committee by 2007.

Our goal is to recruit students into the field of plant agriculture through strategies that promote our disciplines in high schools.

A faculty champion will be identified to lead the outreach initiative and enlist graduate students to participate.

The committee will:

- 4.1.1 Develop multimedia materials for high schools (e.g., introduce a tab specifically for high school students on the Plant Agriculture website).
- 4.1.2 Work with local teachers and recent Plant Agriculture graduates who have become high school teachers in order to understand current curricula and develop appropriate new teaching modules.
- 4.1.3 Work directly with the Ontario Ministry of Education, eventually, to develop province-wide modules (e.g., presentation to the annual Ontario Science Teachers' Conference).

- 4.1.4 Identify potential funding sources to develop these modules (NSERC PromoScience).

**5. Revitalize our international research and teaching collaborations.**

- 5.1 Appoint an International Faculty Liaison Officer.

To be appointed by December, 2005 to:

- 5.1.1 Inform faculty of international opportunities (e.g., CGIAR-Canada Linkage Fund, international graduate student funding sources, CIDA grants, etc.)
  - 5.1.2 Promote the Department to international organizations, universities, NGOs who could benefit from our expertise (UNESCO, FAO, CGIAR, Africa Farm Radio Network).
  - 5.1.3 Form liaisons with other departments on campus to forward seminar notices of interest and develop joint seminars/colloquium (Rural Studies, International Development).
- 5.2 Encourage and reward individual faculty for organizing meetings and workshops of international societies at Guelph.
  - 5.3 Establish the International Teaching Partners Committee (by 2006) to build up to three institutional "linkages" that bring international students to OAC (goal to have the first student at Guelph in September, 2007).