

**DEPARTMENT OF HORTICULTURE
STRATEGIC PLAN**

2012 - 2017

July 13, 2012

Background

The Department's previous strategic plan spanned from 2001-2006. From 2007 to present, WSU has experienced a period of unprecedented budget reductions that have demanded program prioritization, reorganization, and consolidation. This restructuring effort has resulted in recommendations that materially affect the present organization of the department and elements of its strategic plan.

On July 1, 2012, the Department of Horticulture and Landscape Architecture (HLA) consolidated to focus on Horticulture only. At that time, the Landscape Architecture program and faculty moved to Carpenter Hall to become part of the newly established School of Design and Construction Management in the College of Engineering and Architecture. While the department name changed from HLA to Horticulture, maintaining interactions with the LA program and faculty is a departmental priority. The Landscape Design and Implementation major of the Integrated Plant Sciences degree program in CAHNRS will continue to depend on key courses offered by LA faculty (design courses). Similarly, several undergraduate courses offered in Horticulture will remain integral to the BLA degree program.

This strategic plan has been prepared with input from faculty, staff, and graduate students of the Department of Horticulture and Landscape Architecture. The Mission Statement and Goals of the strategic plan were revised from the previous 5-year plan (2001-2006), which was established at a statewide department retreat held in Puyallup in August of 2000. A Strategic Planning Committee comprised of five Professors, two Associate Professors, and three Assistant Professors, representing three Research and Extension Centers and the Pullman campus, produced the initial draft of the 2012-2017 plan in a series of meetings during fall semester 2011. This group established the Mission, Goals, departmental objectives and strategies which were then circulated among faculty, staff and graduate student representatives statewide for feedback in March, 2012. The Draft Strategic Plan was edited by the Department Chair and discussed at a statewide faculty meeting and at a follow-up departmental retreat in April and July 2012, respectively. The final version of the plan reflects the results of these meetings and other input from faculty and staff. A list of the participants in this process is appended at the end of this document.

Departmental context in relation to CAHNRS

The Department of Horticulture contributes significantly to two of the four programmatic areas that collectively define the scope of research, scholarship and outreach activities of the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS). The first programmatic area, *Agricultural Production and Post Harvest Systems*, encompasses a wide range of activities core to the primary production of plants and animals and their products. The Department of Horticulture contributes to seven of the fourteen areas identified by CAHNRS as central to this program. These areas include irrigated cropping systems,

perennial horticulture production and post-harvest systems, technologically intensive agriculture, plant breeding programs, urban and environmental horticulture, health and nutrition of food products, and food processing and technology.

The second programmatic area, *Food System Plant and Animal Biotechnology*, has been a focus of considerable investment by CAHNRS over the past seven years and is congruent with WSU's emphasis on building excellence in fundamental plant sciences as it relates to agricultural productivity. The Department of Horticulture participates in the following areas identified as core to this program: plant biochemistry, plant breeding and genetics, plant genomics, and bioinformatics.

These two programmatic areas are integral components of two of the four areas of preeminence identified by CAHNRS (see <http://cahnrs.wsu.edu/downloads/strategic-plan-2008-081.pdf>), namely Basic Plant Sciences, Genetics, and Genomics; and Horticultural Production and Processing Systems. Much of the Department's strategic plan emphasizes growth and resource allocation toward these programmatic areas. An additional emerging area for the Department of Horticulture is the CAHNRS area of preeminence of Biologically Intensive (Sustainable) and Organic Agriculture. The Department has identified new faculty positions to increase our ability to achieve excellence in this area.

Department mission statement

As one of the world's premier horticultural science institutes, discover and disseminate knowledge that enhances the economic, environmental and social sustainability of horticultural production systems and the quality of life of the world's growing population.

Goal I: Deliver learning opportunities in horticulture consistent with our mission.

Objective 1: Implement, strengthen and promote world-class undergraduate horticulture science-based curricula in the Integrated Plant Sciences (IPS) and Ag Food Systems (AFS) Degree Programs.

Strategy: Provide for the horticulture science-based needs of state, regional, national and international students.

Action Plans

- Lead in the implementation of the IPS curricula.
- Foster close collaboration with Landscape Architecture (LA) to assure reciprocal delivery of courses in support of LA and IPS degree programs.
- Promote the minor in Horticulture.
- Emphasize experiential learning and deliver a quality research experience to undergraduate students.
- Seek extramural funding to support research training for undergraduate students (e.g., NSF-REU).
- Partner with CAHNRS and University of Idaho (UI) faculty to support delivery and diversity of horticulture courses in the IPS and AFS degree programs.

- Expand synchronous and asynchronous distance courses to serve students.
- Forge reciprocal articulation agreements with community colleges to facilitate transfer of students into IPS and AFS degree programs.
- Promote the IPS and AFS degree programs and participate in recruitment events.
- Increase participation of faculty based at Research and Extension Centers and county-based Extension in delivery of undergraduate education.
- Improve curricula through assessment of strengths and weaknesses of programs and courses.

Objective 2: Implement, strengthen and promote world-class graduate horticulture science-based education.

Strategy: Promote faculty participation in graduate programs to meet department benchmark targets.

Action Plans

- Elect faculty with a keen interest in promoting graduate education to the Department's Graduate Executive Committee.
- Mandate that all faculty participate in graduate student training and mentoring.
- Increase and continue to allocate internal and external resources to support graduate students on all campuses and R&E centers.
- Expect tenure-track and tenured faculty to serve as MSAg, MS and/or PhD committee chairs.
- Grow capacity for graduate student mentoring and training by adding faculty positions (tenure track, non-tenure track, affiliate, adjunct) in strategic program areas.
- Recruit graduate students, increase external awareness of our graduate programs and opportunities, and enhance the growth of horticulture and allied graduate programs (MPS; MSAg).

Objective 3: Provide high quality learning opportunities by employing leading edge technology.

Strategy: Procure and utilize the latest equipment and technologies to develop and implement degree programs in horticulture.

Action Plans

- Provide state-of-the-art learning environments in horticulture classrooms.
- Partner with Center for Distance and Professional Education (CDPE) personnel to develop online curricula and utilize technologies to support synchronous and asynchronous distance delivery of courses.

- Maintain plant production, greenhouse, processing and other facilities to support the curricula, degree programs and activities of the Horticulture and V&E Clubs.
- Create and promote curricular objectives that reflect the latest advances in horticultural science and production for landscape, nursery, greenhouse and horticulture crops.

Goal II: Discover and communicate science-based knowledge in horticulture.

Objective 1: Provide, enhance, and efficiently manage infrastructure and technology that facilitates creative potential and productivity.

Strategy: Actively engage in development and maintenance of modern facilities and acquisition of advanced-technology equipment to support fundamental and applied research and applications.

Action Plans

- Initiate and participate in proposals that replace and upgrade research facilities.
- Pursue internal and external resources for equipment related to the improvement of facilities, and invest departmental F&A funds as leverage for additional resources to support acquisition of equipment and maintenance in priority areas.
- Strengthen research facilities that support research and graduate education at R&E centers.

Objective 2: Respond to research needs identified by industry, professional and public constituencies, and Department personnel.

Strategy: Strongly encourage all faculty to participate in scholarly activities.

Action Plans

- Conduct meaningful research of both a basic and applied nature in accordance with identified needs.
- Pursue internal and external resources to support investigations, including (but not limited to) leading or collaborating on large interdisciplinary, multi-state and multi-institutional proposals aimed at securing competitive extramural support for research and extension activities.
- Publish research findings in appropriate venues, especially refereed journals, books and extension publications with high impact.
- Integrate graduate student training and mentoring into scholarly activities.

Objective 3: Promote and reward scholarly and creative interchange.

Strategy: Increase scientific exchange among all faculty.

Action Plans

- Continue seminar offerings statewide and partner with other departments to sponsor external seminar speakers.
- Identify and increase opportunities for scholarly exchange by emphasizing the importance of research internships and graduate education.
- Reward faculty for team building and statewide academic, research, teaching and extension programs.
- Distribute research grant indirect costs to investigators to provide incentives for participation in funded research.
- Support formation and collaborative participation in international consortiums that leverage interdisciplinary expertise to effectively address globally relevant challenges in plant agriculture (e.g., NSF SAVI, Science Across Virtual Institutes).

Goal III: Develop and disseminate science-based knowledge and application of horticultural science through effective outreach and extension.

Objective 1: Deliver outreach programs and activities to extend information to a broad clientele.

Strategy: Develop and implement applied research and outreach and extension programs in response to industry stakeholder and public needs.

Action Plans

- Collaborate with county-based faculty to develop and deliver applied research and demonstration programs.
- Provide science-based knowledge to solve horticultural problems and enhance the economic viability and vitality of Washington's horticultural industries.
- Emphasize environmentally responsible, sustainable and economically sound production practices.
- Use a diversity of media to communicate with clientele, such as WSU and PNW factsheets and manuals, websites, and eXtension publications.

Strategy: Deliver science-based information to WSU affiliated programs, professional organizations, interest groups, agricultural constituencies and prospective students.

Action Plans

- Write and distribute newsletter articles, press releases and web pages to communicate activities, programs and new information.
- Provide training materials and presentations for Master Gardener volunteer training and continuing education.
- Deliver the Viticulture and Enology certificate programs and develop similar programs in tree fruit and other horticultural production systems.

- Involve teaching and research faculty in extension education.
- Participate in non-traditional outreach activities such as digital media productions.

Objective 2: Broaden Department expertise within Extension.

Strategy: Engage county-based extension faculty and state, federal and industry experts to better address clientele needs.

Action Plans

- Recruit extension faculty as affiliates within the Department.
- Involve affiliated and adjunct faculty and other personnel in departmental activities such as guest lectures, seminars, retreats and meetings.
- Include affiliated extension faculty as active partners in research projects.

Goal IV: Foster key internal and external relationships and opportunities to effectively achieve the Department mission.

Objective 1: Continue to promote an environment of trust, respect and collegiality that fosters and values diversity and leverages the full capacity and potential of faculty expertise and programs.

Strategy: Cultivate a diverse, positive, enriching and supportive workplace environment.

Action Plans

- Promote an atmosphere and culture of interdependence, advocacy and robust teammanship among all members of the department, particularly as it relates to building our image with the public and stakeholders in pursuit of overall support for our programs and the broad mission of the department.
- Encourage and provide release time for faculty, staff and students to participate in WSU-sponsored professional development programs focused on diversity and workplace environment, including online courses and trainings and workshops sponsored by Human Resources.
- Articulate expectations of performance related to workplace environment and diversity for all faculty and staff.
- Evaluate performance related to cultivating a diverse, positive, enriching and supportive workplace environment during the annual review of faculty and staff. Host annual face-to-face retreats and AMS-based statewide department meetings to address tenure and promotion issues, formulate departmental policies, plan and revise strategic directions.
- Continue to provide funding and resources for faculty and staff to actively participate in meetings and conferences that best promote Departmental priorities.

- Encourage and support departmental activities and team building events (e.g., ad hoc gatherings, activities organized by Graduate Student Club, Hort Club, VE Club, etc.)

Objective 2: Explore synergistic external relationships and pursue those that advance the Department mission.

Strategy: Continue the process of identifying, evaluating the merits of, and engaging in various relationships to enhance the Department’s teaching, research and extension programs.

Action Plans

- Explore, promote and strengthen existing and new synergies with key WSU units, such as Plant Pathology, Crop and Soil Sciences, Entomology, Food Science, and Landscape Architecture, to augment and enhance our capabilities in research, extension and teaching.
- Participate in interdisciplinary programs, such as Molecular Plant Sciences, School of Design, and Center for Reproductive Biology.
- Capitalize on synergies with the University of Idaho and Oregon State University to serve stakeholders in the Pacific Northwest to best accomplish our mission in an era of declining resources.
- Strengthen existing alliances and forge new alliances with USDA/ARS colleagues and other agencies as appropriate.
- Establish MOUs with institutions abroad to foster mutually beneficial research and education partnerships.
- Encourage and support faculty participation in professional development activities that will ultimately enhance the reputation of the department and the breadth and depth of our programs in teaching, research and extension.

Objective 3: Implement the organizational structures that appropriately address constituents’ long-term needs in teaching, research, and outreach.

Strategy: Use CAHNRS Ag Kitchen Cabinet, Advisory Council, and horticulture faculty relationships with industry and commodity groups to provide guidance and advocacy for shaping Departmental priorities in line with stakeholder needs.

Action Plans

- Participate in strategic and long-range planning sessions with industry stakeholders.
- Collaborate with personnel from CAHNRS Alumni and Friends to identify and pursue mutually beneficial initiatives in partnership with industry and commodity groups.

- Encourage faculty and staff to foster and maintain close ties with stakeholder groups (e.g., WTFRC, WSPC, WAC, Tilth, small fruit commissions, PNVA, NARF) as a main conduit for information exchange.

Objective 4: Increase communication and interaction within the Department.

Strategy: Promote transparency and regular communication within the Department.

Action Plans

- Maintain a user-friendly, up-to-date and informative Departmental Web Site as a means for information flow.
- Encourage increased attendance and participation of faculty and staff in departmental seminars and faculty meetings.
- Use monthly faculty meetings, focused topic meetings, electronic communications and annual retreats to highlight and share departmental and individual activities.

Goal V: Develop new teaching, research, and outreach programs statewide.

Objective 1: Formulate short and long-range hiring plans and staffing strategies to best serve the needs of student, professional and industry constituencies.

Strategy: Implement the following hiring plan to strengthen the Department's signature programs in tree fruits, viticulture, small fruits, potatoes, and plant signaling.

Action Plans

- In consultation with industry, prioritize and fill endowed faculty positions in tree fruit physiology.
- Hire a program leader in extension to further strengthen the effectiveness of our research programs in tree fruit horticulture.
- Develop a horticultural phenomics/physiology position to augment Department strengths in commodity-based horticulture, crop physiology, bioinformatics, genomics, genetics, and breeding.
- Develop a BIOAg position in vegetable cropping systems (non-potato) in the Columbia Basin with a focus in basic research to complement existing and upcoming Department strengths in phenomics, genomics, genetics, and breeding and to support teaching needs in the IPS/AFS degree programs.
- Hire faculty to maintain our teaching, research and outreach capacities in viticulture and small fruits.

Strategy: Continuously update long-range hiring plans to achieve the Department mission in teaching, research, and outreach.

Action Plans

- Prioritize areas for hiring tenure-track and non-tenure track clinical and research faculty at least annually.
- Pursue unique opportunities, such as interdepartmental appointments, industry endowments and spousal accommodations, to create and fill positions.
- Use non-tenure track positions to diversify Department offerings in strategic areas lacking support for robust research programs.
- As additional resources become available, expand research, teaching and outreach programs to strengthen existing programs or to establish new areas of expertise such as:
 - Urban and environmental horticulture to focus on environmentally sound landscape horticulture and education on the west side, including building partnerships with hydrological engineers and water quality and passive energy specialists, to progressively address current issues and opportunities in urban agriculture.
 - Plant biotechnology, tissue culture and propagation serving horticultural industries statewide.
 - Floriculture in support of teaching needs in Pullman and the cut flower and bulb industries in WA.

Strategic Planning Committee

Preston Andrews, Associate Professor
Amit Dhingra, Assistant Professor
John Fellman, Professor
N. R. Knowles, Professor
Virginia Lohr, Professor

Dorrie Main, Associate Professor
Carol Miles, Associate Professor
Pat Moore, Professor
Cameron Peace, Assistant Professor
Matt Whiting, Associate Professor