

## FSHN STRATEGIC PLAN 2005-10

### **EDUCATION PRIORITY: Strengthen undergraduate, graduate and professional education to enhance student learning.**

#### **Goal 1. Create a supportive and innovative learning environment to strengthen critical thinking of students and to prepare future leaders in food science and nutrition professions.**

Objective 1. Develop curricula to assure student success in professional roles.

##### Implementation Strategies

1. Use External Advisory Committee to evaluate curricula, focus on industry needs, conduct employer surveys, and determine employers of Nutritional Science graduates in health fields. DAC will start in 2006, implement fall '06, may have subgroups within FSHN and external advisory members.
2. Evaluate curricula by obtaining feedback on student performance in the continuum of courses with a specific focus on student performance. Visit with other departments about outside courses (biology, biochemistry, and others). Determine technical skills attained as a result of courses. Define the mechanism for addressing deficits. Establish special topics faculty meeting at the end of the school year for feedback about ways to improve course experiences and achieve student learning outcomes. (Curriculum Committee, Outcomes Assessment Committee, Associate Chair)

Objective 2. Provide facilities, equipment, and technology to support effective teaching and learning.

##### Implementation Strategies

1. Organize more faculty group discussions about laboratory needs and equipment by discipline for planning of capital expenditures. (Department Chair, Associate Chair, DAC)
2. Provide laboratory for undergraduate nutrition; provide food processing equipment with data-logging ability. (Chair, Associate Chair)

Objective 3. Provide high-quality research experiences for undergraduate and graduate students.

##### Implementation Strategies

1. Evaluate percentage of graduate students supported by research or teaching assistantships, evaluate undergraduate teaching assistantship program, foster undergraduate research opportunities, support and facilitate international work of students and faculty, survey graduates about their research experiences, and encourage graduate students to present research at national conferences. (Chair, Associate Chair, Graduate Committee, DOGEs, graduate faculty)
2. Allocate internal resources to support signature areas, encourage graduate students to write extramural funding proposals, cultivate collaborations where research and teaching overlap (i.e., Wellness Center), and support interdisciplinary degree programs. (Chair, faculty)

**EDUCATION PRIORITY: Strengthen undergraduate, graduate and professional education to enhance student learning.**

**Goal 2. Recruit and retain high-ability, well-prepared, highly motivated and culturally diverse students and increase enrollment to 360 undergraduate students (230 dietetics, 80 food science, 50 nutritional science).**

Objective 1. Develop, implement and assess recruitment plans for undergraduate, graduate and dietetic internship programs.

Implementation Strategies

1. Recruit students and involve teachers from Iowa and MN, IL, MO with Hooked on Science summer workshop. (Recruitment Committee, FSHN faculty)
2. Increase number of pre-health (pre-professional, pre-med) students in nutritional science and dietetics, redesign website as a recruitment tool, promote benefits for undergraduate research, and promote careers in clinical nutrition.

Objective 2. Provide opportunities for high-quality learning community, professional development and international experiences for undergraduate and graduate students.

Implementation Strategies

1. Support FSHN Learning Community (FSHN Advisor, Associate Chair, faculty)
2. Engage food industry employers to provide internships, create professional development and internship opportunities with international food companies in Europe, China and India. (FSHN faculty)
3. Obtain USDA National Needs Fellowships for graduate students in Nutrition and Food Science/Toxicology in 2007, USDA Higher Education Challenge grants and other grants for student development. (FSHN faculty)

**OUTREACH PRIORITY: Translate discoveries into economically useful technologies and facilitate their adoption in Iowa and around the world.**

**Goal 1. Effectively transfer FSHN discoveries and technologies to Iowa's food and health industries.**

Objective 1. Foster an environment that encourages faculty entrepreneurship.

Implementation Strategies (what to do, how to do it, how to assess, who?)

1. Develop FSHN policies that encourage faculty members to develop a business and/or contribute to economic development in Iowa.

*Who: DAC (subcommittee), university and college recommendations will be used to guide FSHN policies, Pappajohn Center, dept. think tank (significant involvement across dept.), including P&T policies.*

*Success: P&T policies revamped to consider role of entrepreneurship and commercialization by Spring 2007; 1 new business by 2010 associated with FSHN; 3 faculty who have attempted to commercialize ISU technologies by 2010.*

2. Educate faculty about how to become more entrepreneurial and institute incentives for them to be more knowledgeable about entrepreneurship and about how they can contribute to economic development in Iowa.

*Who: FSHN Entrepreneurship Task Force in cooperation with the Pappajohn Center and the College of Agriculture will provide an entrepreneurship workshop and \$500 faculty development funds to FSHN participants.*

*Success: Workshop will be held in Fall 2006 with 50% FSHN faculty participation rate.*

Objective 2. Build infrastructures to facilitate technology development, adoption and commercialization.

Implementation Strategies

1. Use the four department-related centers to facilitate industry links and collaborations for technology development, adoption and commercialization.

*Who: Center directors will meet with the FSHN. chair and interested faculty to develop a strategy as to which industry partners we will focus on, how to discern key industry needs that best align with FSHN strengths, and which faculty members will be most involved in these efforts.*

*Success: 2 new FSHN/industry collaborations will be in place by Fall 2008; one new commercialization venture will be realized by 2010.*

2. Engage and invite more companies to participate in seminars, workshops, meetings, etc., to interact with faculty and students.

*Who: FSHN Technology Transfer Task Force will identify a theme and lead faculty who will develop an industry-targeted workshop.*

*Success: FSHN workshops will be held with ~20 industry participants biannually, beginning in Spring 2007.*

**OUTREACH PRIORITY: Translate discoveries into economically useful technologies and facilitate their adoption in Iowa and around the world.**

**Goal 2. Assist in economic development of Iowa's food and health industries through educational outreach and services.**

Objective 1. Develop closer alliances with food and health industries, small businesses and entrepreneurs that enhance their abilities to adopt new technologies.

Implementation Strategies (what to do, how to do it, how to assess, who?)

1. Engage industry in understanding our proposals (letters of support, whenever possible).

*Who: FSHN communications specialist, FSHN chair, dept.-assoc. Center Directors will develop a list of potential industry partners and their main interest areas, key contact personnel, which will be updated annually and disseminated to FSHN faculty to use in proposal development.*

*Success: Initial list will be generated by Spring 2007; industry letters will be tallied on an annual basis, as part of reviewing grants/contracts productivity.*

2. Identify and engage external partners in surveying their crucial needs for economic development.

*Who: DAC, Dept.-assoc. centers, External advisory board (whatever form it takes); Battelle Report to the College of Agriculture and CCUR, Fall 2006—implement appropriate recommendations by Fall 2007.*

*Success: 2 new services/activities will result.*

Objective 2. Enhance information technologies to facilitate educational outreach.

Implementation Strategies

1. Improve and enhance dept.-associated web sites (Centers help) including (personal)—

*Who/what: FSHN website will link with key ongoing signature areas/programs—identify key faculty/staff to have responsibility to create/maintain web sites, with assistance from a new communications specialist position.*

*Success: Signature area web pages will be in place by Fall 2006 and updated quarterly thereafter.*

2. Determine what new info technologies/devices we need to target to effectively deliver outreach info (Breeze, Video-cam, podcasting)

*Who: Dept. computer technology resource committee will examine what technologies we need to invest in and provide a cost estimate and plan for adoption and maintenance.*

*Success: Key faculty seminars and industry workshop(s) will be available through these new technologies by Fall 2007.*

**OUTREACH PRIORITY: Translate discoveries into economically useful technologies and facilitate their adoption in Iowa and around the world.**

Objective 3. Expand innovative consumer and professional continuing education.

Implementation Strategies

1. Develop external partnerships for consumer education

*Who: FSHN Extension faculty will lead regular discussions with interested FSHN faculty regarding key themes/topics/potential partners for consumer educational outreach.*

*Success: 1 new partnership will be developed with consumer education program delivered and assessed by Spring 2007; ongoing or new partnership programming will continue annually through 2010.*

2. Identify key food industry needs and provide workshops, conferences, online courses, etc... (e.g., processing GMO crops, segregation of GMO crops, identity preservation)—especially ongoing signature areas such as food ingredients/utilization from unique crop varieties with especially useful oils/starches/fibers etc...

*Who/Success: see Obj. 2, Part 2.*

**RESEARCH PRIORITY: To address local and global critical needs in food science and human nutrition by building upon our current strengths and expanding our research programs.**

**Goal 1. Develop an environment that supports and enhances excellence in research to improve the quality of life for Iowans and citizens of the world.**

Objective 1. Recruit faculty in fundable research areas of national importance.

Implementation Strategies (what to do, how to do it, how to assess, who?)

1. Charge DAC with keeping abreast of current trends of importance on the horizon, with DAC reporting updates at faculty meetings quarterly.
2. Convene special faculty meetings to discuss these findings with thorough and ongoing discussion about hiring faculty in fundable research areas.

Objective 2. Improve facilities and support services by acquiring or renovating space to accommodate new laboratories for new faculty and graduate students.

Implementation Strategies

1. Charge Space & Renovations Committee with identifying the critical needs of faculty and students in our respective buildings.
2. Engage the External Advisory Board (first increase their numbers) in identifying and securing funding sources for major renovations.

Objective 3. Provide infrastructure and support to obtain extramural research.

Implementation Strategies

1. Examine support services within FSHN to create assistance with equity for proposal development, submission, and continuance, particularly with respect to budget.
2. FSHN-affiliated centers will invite industry representatives to campus for interaction to identify common areas of research interest and to foster industry-supported research.

Objective 4. Strengthen focus areas of research.

Implementation Strategies

1. Create interdisciplinary research cluster areas to mentor faculty, staff, postdocs, and graduate students.
2. Reward faculty, staff, postdocs, and graduate students who are successful with this model.

**RESEARCH PRIORITY: To address local and global critical needs in food science and human nutrition by building upon our current strengths and expanding our research programs.**

**Goal 2. Promote our research accomplishments to further enhance our nationally recognized research and scholarly reputation.**

Objective 1. Promote our research activities nationally and internationally.

Implementation Strategies (what to do, how to do it, how to assess, who?)

1. Nominate qualified faculty for national and international research awards.
2. Mentor, encourage, and nominate students to apply for national scholarships, fellowships, and research competitions.

Objective 2. Expand a diversified funding base and increase external federal support.

Implementation Strategies

1. Provide buy-out opportunities for faculty to write mega grants in research cluster areas.
2. Provide budget and secretarial support for submitting external grants.

Objective 3. Enhance visibility of our research programs with industry, alumni, professional, and multi-institutional groups.

Implementation Strategies

1. Sponsor seminars/visits/open house with prominent industry and health care representatives to enhance understanding, discussion, and collaborative efforts.
2. Hire P & S specialist to develop programs that engage industry, alumni, and institutions across the state and beyond.....
3. “Sell” our research and facilities by meeting with stake holders at national meetings.