

Iowa State University
Department of Food Science and Human Nutrition
College of Agriculture and Life Sciences
College of Human Sciences

Strategic Plan 2016-2021

Our mission is to enhance sustainable food and nutrition systems that promote human health and well-being and improve the quality of life through education, research and outreach in food and nutrition sciences

Our vision is to be a global leader in food and nutrition sciences and technologies by integrating outcomes driven education, collaborative research and knowledge application through research

Our values

- Achieve global recognition for excellence in our strategic areas
- Advance a culture of diversity, inclusion, social justice and equality
- Design and deliver relevant, innovative, high quality curricular offerings to optimize student learning and enrollment
- Enhance community with our alumni, friends and stakeholders
- Integrate and develop sustainable, responsible, novel technologies that advance our mission
- Promote health through food, nutrition and lifestyle
- Promote interdisciplinary and systems research

Our Strategic Areas of Excellence

- Community Education for Health and Food Safety
- Food Safety and Quality
- Functional Foods and Packaging
- Green and Sustainable Food and Biomaterials Processing Technologies
- Nutrition, Lifestyle and Health in Early-Life
- Outcomes-Driven Education
- Prevention and Mitigation of Type 2 Diabetes

Goals within Our Strategic Areas of Excellence

Community Education for Health and Food Safety

Our goals are to enhance research, teaching, extension and outreach efforts to facilitate desirable health and food safety behaviors by developing self-efficacy (knowledge and skills) through our expertise in nutrition, wellness, health promotion, food quality, and food safety. Our target populations include youth, families, older adults, health care industry, and food industries (retail, manufacturing, wine, and local foods).

Goals

1. Promote healthy systems, communities and people.
2. Enhance awareness of food safety knowledge and best practices to reduce the foodborne illness burden in the United States and abroad.
3. Hallmark Iowa as the center for wine education.

Objectives and Benchmarks

Goal 1: Promote healthy systems, communities and people

Objective 1: Increase adoption of “Drink Right, Snack Smart, Move More (DRSSMM)” guidelines by youth organizations in Iowa.

Benchmark 1: Five new local chapters of youth organizations in Iowa agree to adopt these guidelines each year.

Benchmark 2: Documentation is completed showing adoption of “DRSSMM” guidelines for at least 3 local chapters of youth organizations in Iowa each year.

Objective 2: Improve the nutrition behaviors and status of Iowans

Benchmark 1: Secure funding (e.g. USDA, Private foundations and state agencies) to develop and evaluate innovative nutrition and wellness programs for Iowans.

Benchmark 2: Collaborate with current and new state partners (e.g. Department of Education, Iowa Department of Public Health) for statewide distribution of nutrition and wellness programming.

Objective 3: Establish community infrastructure that promotes health and well-being policy change.

Benchmark 1: Serve on county, regional and/or state committees addressing nutrition and wellness initiatives and policies (e.g. regional food systems working groups, school wellness committees, CHNA HIP committees)

Benchmark 2: Conduct research exploring impact of nutrition and wellness initiatives and policies (which included implement community based participatory research projects in two communities).

Benchmark 3: Conduct research with underserved populations (e.g. older adults, Latino/Latinas, African Americans) state-wide.

Goal 2: Enhance awareness of food safety knowledge and best practices to reduce the foodborne illness burden in the United States and abroad

Objective 1: Increase the compliance rate with food safety regulations for FDA regulated food industry.

Benchmark 1: Develop new food safety educational programs to promote safe food handling (e.g. Good Agricultural Practices workshops, Food Safety Modernization Act Produce and Human Rule Trainings, and specialty niche short courses).

Benchmark 2: Evaluate of the impact of educational courses on the food industry through tracking behavioral changes in the food industry.

Objective 2: Educate consumers on safe food handling practices

Benchmark 1: Educate youth (K-12) and adults (13 and beyond) on best food safety handling practices.

Benchmark 2: Educate home-based and small-scale food entrepreneurs through securing grants, identification of knowledge gaps and needs, and development of workshops, trainings, and online materials.

Benchmark 3: Educate youth (K-12) on food handling globally through outreach programs.

Goal 3: Hallmark Iowa as the Center for Wine Education

Objective 1: Build a winery at Iowa State University.

Benchmark 1: Gain financial support for the winery.

Benchmark 2: Secure staff support for the winery.

Objective 2: Develop an educational center for wine quality and safety.

Benchmark 1: Develop educational courses on wine quality and safety.

Benchmark 2: Develop an apprenticeship program for wine makers.

Objective 3: Evaluate the Impact of Iowa State University on wineries.

Benchmark 1: Develop and implement a survey for each visit (e.g. in-person, phone, or conference).

Benchmark 2: Capture the economic gains accomplished through wine education and wine quality testing.

	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Goal 1: Promote healthy systems, communities and people.					
Objective 1: Increase adoption of “Drink Right, Snack Smart, Move More (DRSSMM)” guidelines by youth organizations in Iowa.					
Benchmark 1: Five new local chapters of youth organizations in Iowa agree to adopt these guidelines each year.	X	X	X	X	X
Benchmark 2: Documentation is completed showing adoption of “DRSSMM” guidelines for at least 3 local chapters of youth organizations in Iowa each year.	X	X	X	X	X
Objective 2: Improve the nutrition behaviors and status of Iowans.					
Benchmark 1: Secure funding (e.g. USDA, Private foundations and state agencies) to develop and evaluate innovative nutrition and wellness programs for Iowans.	X	X	X	X	X
Benchmark 2: Collaborate with current and new state partners (e.g. Department of Education, Iowa Department of Public Health) for statewide distribution of nutrition and wellness programming.	X	X	X	X	X
Objective 3: Establish community infrastructure that promotes health and well-being policy change.					
Benchmark 1: Serve on county, regional and/or state committees addressing nutrition and wellness initiatives and policies (e.g. regional food systems working groups, school wellness committees, CHNA HIP committees).	X	X	X	X	X
Benchmark 2: Conduct research exploring impact of nutrition and wellness initiatives and policies (which included implement community based participatory research projects in two communities).				X	X
Benchmark 3: Conduct research with underserved populations (e.g. older adults, latino/latinas, African Americans) state-wide.	X	X	X	X	X
Goal 2: Enhance awareness of food safety knowledge and best practices to reduce the foodborne illness burden in the United States and abroad.					
Objective 1: Increase the compliance rate with food safety regulations for FDA regulated Food Industry.					
Benchmark 1: Develop new food safety educational programs to promote safe food handling (e.g. Good Agricultural Practices workshops, Food Safety Modernization Act Produce and Human Rule Trainings, and specialty niche short courses).	X	X	X	X	X
Benchmark 2: Evaluate of the impact of educational courses on the food industry through tracking behavioral changes in the food industry.			X		X
Objective 2: Educate consumers on safe food handling practices					

Benchmark 1: Educate youth (K-12) and adults (13 and beyond) on best food safety handling practices.	X	X	X	X	X
Benchmark 2: Educate home-based and small-scale food entrepreneurs through securing grants, identification of knowledge gaps and needs, and development of workshops, trainings, and online materials.		X	X	X	X
Benchmark 3: Educate youth (K-12) on food handling globally through outreach programs			X	X	X
Goal 3: Hallmark Iowa as the center for wine education					
Objective 1: Build a winery at Iowa State University.					
Benchmark 1: Gain financial support for the winery.	X	X	X		
Benchmark 2: Secure staff support for the winery.				X	X
Objective 2: Develop an educational center for wine quality and safety.					
Benchmark 1: Develop educational courses on wine quality and safety.	X	X			
Benchmark 2: Develop an apprenticeship program for wine makers			X	X	X
Objective 3: Evaluate of the Impact of Iowa State University on wineries					
Benchmark 1: Develop and implement of a survey for each visit (e.g. in-person, phone, or conference)			X	X	X
Benchmark 2: Capture the economic gains accomplished through wine education and wine quality testing			X	X	X

Food Safety and Quality

Our goals are to advance research, teaching, extension and outreach programs to innovate and promote effective farm-to-fork measures for ensuring the microbial and chemical safety, nutritional content and desirable sensory attributes of foods, achieved through our expertise in microbial, chemical and sensory analysis of foods and in novel food safety intervention strategies

Overarching goal: To innovate and promote effective farm-to-fork measures for ensuring the microbial and chemical safety, nutritional content and desirable sensory attributes of foods

Goal 1: To achieve national and international recognition for our group's expertise, activities and resources					
Goal 2: To effectively engage federal and industry stakeholders in a sustainable cycle of funding, discovery and change (knowledge, action, condition)					
Goal 3: To recruit and train the next generation of academic and industry leaders in food safety and food quality					
Goal 1: Group Recognition	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Objective 1: Enhanced media presence (by 08/16)		X			
Benchmark 1: By 02/16, have met with FSHN IT to establish means to facilitate quick, easy update of team's activities for newsletter and social media (SharePoint, including mobile apps)		X			
Benchmark 2: By 04/16, have developed and shared document establishing how faculty can edit their info (publications, achievements) on Dept. website		X			
Objective 2: By 01/17, have performed feasibility study on building/equipping creamery at ISU			X		
Benchmark 1: By April 2016, engage MDA resources at annual planning meeting regarding advice, assistance, funding for study		X			
Objective 3: By 01/20, have established in-house Process Authority expertise as a means to increase FSHN capabilities/profile and attract industry funding					X
Benchmark 1: Ongoing process, Mendonca, Shaw	X	X	X	X	X
Goal 2: Stakeholder Engagement					
Objective 1		X			
Benchmark 1: By 01/16 (and annually afterward), establish twice-per-semester group meetings for year		X			
Benchmark 2: By 02/16, have met with FSHN IT to explore use of MS SharePoint as means for sharing group data and managing info, people and projects		X			

Benchmark 3: By April 2016, have developed and shared a continually updated document on grant cycles (application dates, links to RFP's, calendar notifications, etc.) to facilitate notification of and planning and coordination for team grant applications		X			
Benchmark 4: By 04/16, have developed and shared a document listing University and other resources offering assistance with grants		X			
Benchmark 5: By 07/16, have developed and shared a map of industry, federal and private funding sources as a visual aid for grants planning		X			
Benchmark 6: By 01/17 (and annually afterward), plan, write and submit at least one integrated team grant application			X	X	X
Objective 2: By 01/17, have worked with FSHN and College IT to establish improved methods for tracking of and access to industry contacts and impacts (new opportunities, documentation for progress reports, faculty annual reports, P&T)			X		
Benchmark 1: By 02/16 have met with FSHN IT to express needs and establish approach		X			
Benchmark 2: By 05/16, have generated input from Food Safety and Quality team on elements needed for industry-tracking database or portal		X			
Objective 3: By 05/17, have developed and offered at least two new short courses for industry. Potential courses include HACCP and sanitation for the wine industry and courses for produce, food and feed industries based on FSMA mandates		X			
Benchmark 1: By 05/16, establish which courses to offer and have begun development		X			
Benchmark 2: By 08/16, begin advertisement for Summer/Fall 2017 courses		X			
Benchmark 3: Offer the two new courses Summer/Fall 2017 and annually afterward			X	X	X
Goal 3: Training Future Leaders					
Objective 1: By 05/17, begin annual Food Safety and Quality team efforts to obtain USDA National Needs funding for new PhD students		X			
Benchmark 1: By 10/16, have held team meeting to establish topics, strategy and assign responsibilities for writing		X			
Benchmark 2: By 12/16, have contacted FSHN Grant Coordinator to about intent to apply for 05/17 NN deadline		X			
Benchmark 3: Submit one competitive, integrated USDA NN grant application annually afterward			X	X	X

Functional Foods and Packaging

Our goals are to improve ingredients, additives, nutrition and packaging of food products across the supply chain with expertise to enhance functionality of food through innovations in nutrition, ingredients and packaging to improve health, shelf-life and the consumer experience.

Goal 1: Improve ingredients, additives, nutrition and packaging of food products across the supply chain.					
Goal 2: Provide expertise with enhancing functionality of food through innovations in nutrition, ingredients and packaging to improve health, shelf-life and the consumer experience.					
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Objective 1: Develop innovative food ingredient technology					
Benchmark 1: Integrate with private industry for private funding and new research ventures.	5 connections	5 connections	8 connections	10 connections	12 connections
Benchmark 2: Improve interdepartmental and cross-campus collaboration through grants and funded research	1 collaboration with outside academic unit	2 collaboration with outside academic unit	2 collaboration with outside academic unit	3 collaboration with outside academic unit	3 collaboration with outside academic unit
Objective 2: Enhance and augment nutritional benefits through novel ingredients.					
Benchmark 1: Develop of patent disclosures	1 patent disclosure per year	1 patent disclosure per year	2 patent disclosures per year	2 patent disclosures per year	3 patent disclosures per year
Benchmark 2: Increase peer-reviewed publications.	3 per year	3 per year	4 per year	4 per year	5 per year
Benchmark 3: Disseminate research activities and publications to a broader audience	2 trade journals or non-peer review and 2 podcasts	2 trade journals or non-peer review and 2 podcasts	3 trade journals or non-peer review and 2 podcasts/media outlets	3 trade journals or non-peer review and 2 podcasts/media outlets	4 trade journals or non-peer review and 4 podcasts/media outlets/National Coverage

Objective 3: Evaluation of packaging performance, analysis and novel materials.					
Benchmark 1: Integrate with private industry to evaluate new materials (2 conferences and 2 university visits).	2 conferences and 2 university visits per year	2 conferences and 2 university visits per year	3 conferences and 5 university visits per year	3 conferences and 8 university visits per year	4 conferences and 10 university visits per year
Benchmark 2: Create new funded partnerships with private industry	4 companies	6 companies	8 companies	10 companies	15 companies
Benchmark 3: Place undergraduate and graduate students at internships	1 undergrad and 1 grad	1 undergrad and 1 grad	2 undergrad and 2 grad	5 undergrad and 3 grad	6 undergrad and 4 grad
Benchmark 4: Develop new courses and modify existing courses to support packaging and preservation of novel foods, ingredients and new technologies	1 new undergraduate course	1 new graduate course and 1 modification	3 course modifications	1 new undergraduate course 2 modifications	1 new graduate course 2 modification

Green and Sustainable Food and Biomaterials Processing Technologies

Our goals are the development of enabling technologies to maximize the value of agricultural commodities and reduce environmental impact in food, feed, fiber, and fuel manufacturing; formation of interdisciplinary teams to develop and assess novel and sustainable technologies.

Our main areas of research, teaching or outreach:

- Developing novel food, feed, fuel, and biomaterial processing technologies, such as protein modification for improved functionality, engineered nanoparticle-based biocatalysis, high voltage atmospheric cold plasma disinfection, aqueous and integrated grain processing, fermentation, nano-compositing and performance characterization of lipids for edible coating, waste water treatment by microbial biofilm, and biodegradable and biorenewable materials from commodity feedstocks;
- Applying life cycle assessment of bio-based systems to quantify environmental impacts and techno-economic analysis to quantify costs and benefits;
- Enhancing learning of undergraduate and graduate students on food processing (thermal, non-thermal processes), engineering principles, and pilot scale operations;
- Assisting industry clients in designing, investigating, and scaling-up novel technologies to extract and purify functional ingredients (proteins, carbohydrates, lipids, etc.) from plant (beans, corn), animal (eggs), and industrial sources.

Overarching goals: Developing and applying novel and translational food, fuel, and biomaterial processing technologies to meet the sustainability need.

Specific objectives (5-year action items):

- Preparing workforce-ready and learning-enabled students who are equipped with bio-processing principles and hands-on research experience; synchronizing and stream-lining teaching on applications of industrial biotechnology, green chemistry, and sustainability;
- Creating new and safe products and increasing processing efficiency by developing green technologies that are LCA and TEA validated; increasing research activities;
- Engaging policy makers on creating an environment to promote a biobased economy
 - Providing workshops and short-courses on novel technology, environmental sustainability, food safety, food security, and IP training/creating increasing knowledge and efficiency for persons working in government, private industry and non-profits; fully utilizing the resources and connections established by CCUR and CB²;
 - Expanding services and expertise to provide technical assistance and access to the state-of-the-art pilot plant manufacturing facilities for food, feed, fuel, and biomaterials; making our research and pilot plants the leader and model facility in the country;
- Systematically evaluating economic development and impact

5-year annual measureable benchmarks:

	2016-2017	2018	2019	2020	2021
Enhance Student experience	Identify needs (ex - transport phenomena, mass/energy transfer, etc)	Coordinate teaching w/ ABE Increase number of student participation from other dept		Make bioprocessing a requirement for undergrad; New classes created.	
Increase Research Activity	Match industry needs with our expertise, systematically	Grp research retreat; Clusters of people actively pursue industry/funding agency; At least one res mtg (including grad students) per semester.		Increase research spending; Greatly increase number of pubs.	
Engage stakeholders	Website info dissemination	Increase training revenue from industry; Plan workshops or short-courses.		Offer a bioprocessing short-course	25% increase research funding
Economic development	Focused effort on capturing current activity	Develop a plan of action and prioritize activities	implementation of plan		Re-assessment
Diversity	Dept coordinated efforts; Pursue opportunities mindfully.				

Nutrition, lifestyle and health in early life

Our goals are to identify effective lifestyle strategies including nutrition and physical activity to facilitate positive behavior change during early life (preconception through adolescence) in the effort to prevent and/or reduce the burden of chronic disease and micronutrient deficiencies, through our expertise in teaching, research, and outreach at the individual, family, community, and global level.

Goal: To advance the knowledge of the importance of nutrition, lifestyle, and health in early-life and benefit mothers, children and their families.

Objective 1: Promote interaction among signature area researchers

Benchmark: Offer 1-2 lunch-n-learns to share research of signature area researchers.

Objective 2: Educate/mentor graduate students

Benchmark: Offer a 1-2 credit course on maternal/child nutrition including sociocultural perspective, physiology and metabolism, and developmental programming (depending on outcome of IGPNS discussions about future of program); possibility of providing course via distance can be discussed.

Benchmark: Seek funding for graduate students (e.g. USDA NNF, AHA, ADA)

Benchmark: Develop an on-going journal club focused on signature area topics. To be led by signature area researchers; offered each semester (depending on outcome of IGPNS discussions about future of program)

Objective 3: Develop new collaborations

Benchmark: Develop at least 1 new collaboration per year within ISU research community

Benchmark: Develop at least 1 new external collaborations per year.

Objective 4: Enhance visibility of signature area

Benchmark: Document existing strengths with dedicated web-page on department

Benchmark: Identify 1 seminar speaker/semester in the signature area; provide recommendation to seminar committee

Benchmark: Coordinate MVN to focus on Early-life Nutrition

	2016-2017		2017-2018		2018-2019		2019-2020		2020-2021	
	Fall	Sp	Fall	Sp	Fall	Sp	Fall	Sp	Fall	Sp
Goal 1: To advance the knowledge of the importance of nutrition, lifestyle, and health in early-life and benefit mothers, children and their families.										
Objective 1: Promote interaction among signature area researchers										
<i>Benchmark:</i> Offer 1-2 lunch-n-learns to share research of signature area researchers.			X	X	X	X	X	X	X	X
Objective 2: Educate/mentor graduate students										
<i>Benchmark:</i> Offer a 1-2 credit course on maternal/child nutrition including sociocultural perspective, physiology and metabolism, and developmental programming (depending on outcome of IGPNS discussions about future of program) (discuss possibility of offering via distance)				X		X		X		X
<i>Benchmark:</i> Seek funding for graduate students (e.g. USDA NNF, AHA, ADA)		X	X	X	X	X	X	X	X	X
<i>Benchmark:</i> Develop an on-going journal club focused on signature area topics. To be led by signature area researchers; offered each semester (depending on outcome of IGPNS discussions about future of program)			X	X	X	X	X	X	X	X
Objective 3: Develop new collaborations										
<i>Benchmark:</i> Develop at least 1 new external including but not limited to international collaborations per year.		X		X		X		X		X
<i>Benchmark:</i> Develop at least 1 new collaboration per year within ISU research community		X		X		X		X		X
Objective 4: Enhance visibility of signature area										
<i>Benchmark:</i> Document existing strengths with dedicated web-page on department			X							
<i>Benchmark:</i> Identify 1 seminar speaker/semester in the signature area; provide recommendation to seminar committee			X	X	X	X	X	X	X	X
<i>Benchmark:</i> Coordinate MVN to focus on Early-life Nutrition					X					

Outcomes Driven Education

Our goals are to prepare exceptional students for careers in food and nutrition sciences by continually evaluating and improving instructional pedagogy and teaching strategies, achieved by identifying, implementing and evaluating pedagogical models and teaching strategies to optimize learning outcomes and meet industry partner needs.

Goal 1: Prepare exceptional graduates for careers in food and nutrition sciences. Goal 2: Be recognized as a leader in dietetic education through enhancement of professional skills to meet future education and practice needs. The following objectives will integratively meet our goals:					
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Objective 1: establish a monthly faculty special topics discussion regarding innovative approaches to student learning.					
<u>Benchmark 1:</u> In conjunction with the Outcomes Assessment committee, establish an annual focus relative to departmental learning outcomes (communication/teamwork, critical thinking/problem solving, and social concerns/ethics) for monthly faculty special topics discussions.	X				
<u>Benchmark 2:</u> Schedule first Monday of the month special topics for discussion of innovative approaches to student learning <ul style="list-style-type: none"> • revisit/revise departmental outcomes (teamwork, diversity, lifelong learning) • common evaluation measures for communication • common evaluation measures for teamwork (rubric, online tool) 	X				
Objective 2: Establish protocol for peer teaching observations among FSHN courses.				X	
Benchmark 1: Consult with relevant experts/resources on and off campus regarding resources on conducting peer teaching observations.	X				
Benchmark 2: Pilot protocol for peer teaching observation among this strategic area of excellence.		X			
Objective 3: Conduct a scan of student interest and employment options for a sustainable food systems major/option/minor.					
Benchmark 1: Conduct a Qualtrics survey of current students to assess interest in sustainable food systems.		X			
Benchmark 2: Conduct a scan of other institutions of higher education and potential employers regarding employment options.		X			X

Objective 4: Identify and submit a grant proposal to support strategic area of excellence initiatives (Higher Education Challenge Grant, Academy of Nutrition and Dietetics Foundation, Robert Wood Johnson Foundation, Wellmark Foundation, National Needs Fellowship).					
<u>Benchmark 1:</u> Identify mechanisms to explore and identify current trends relative to innovative approaches to student learning	X				
<u>Benchmark 2:</u> Identify potential collaborators outside the Department of Food Science and Human Nutrition (evaluation expertise) for the grant.			X		
Objective 5: This strategic area of excellence will be recognized nationally.					X
<u>Benchmark 1:</u> Members of this strategic area of excellence will serve on national professional organization committees or serve in other leadership capacities.		X			
<u>Benchmark 2:</u> This strategic area of excellence will identify opportunities for awards/recognition of its work.			X		
<u>Benchmark 3:</u> Results of this strategic area of excellence will be presented at national meetings.					X
Objective 6: Establish a mechanism to track economic contributions of student internship experiences.			X		
<u>Benchmark 1:</u> Establish a subcommittee to develop and track student internship experiences.	X				
<u>Benchmark 2:</u> Track and establish monetary value of internship hours completed by students.		X			
Objective 7: 50% of FSHN courses will integrate diversity education into the learning outcomes and content.				X	
<u>Benchmark 1:</u> A monthly special topics will discuss FSHN faculty needs/concerns r/t inclusion of diversity within FSHN courses.	X				
<u>Benchmark 2:</u> Consult with diversity education experts regarding best practice innovative student learning.	X				
<u>Benchmark 3:</u> Include and inventory diversity education within FSHN courses on the learning outcomes grid.		X			
Objective 8: Establish a mechanism to track contributions of student service learning experiences			X		
<u>Benchmark 1:</u> Establish a subcommittee to develop and track student service learning experiences.	X				
<u>Benchmark 2:</u> Track community impact of service learning completed by students		X			

<u>Benchmark 3:</u> Explore and identify potential community partners for long-term sustainable service learning impact.				X	
Objective 9: Identify departmental partnerships with business/industry providing student learning opportunities (culinary/food science/product development challenges).		X			

Prevention and Mitigation of Type 2 Diabetes

Our goals are the prevention and treatment of type 2 diabetes and its complications in humans, animals, and in vitro models with a focus on dietary and therapeutic interventions through our expertise in human nutrition, biochemistry, molecular biology, genetics and physiology.

Goal 1: Development of a collaborative research team to conduct nutrition research aimed at the prevention and mitigation of type 2 diabetes.

Objectives and Benchmarks:

Objective 1: Develop internal and external collaborative teams for submission of external grant proposals and research projects.

Benchmark 1: Submit training grant proposals for funding of M.S. and/or Ph.D. students.

Benchmark 2: Establish new collaborations with faculty from outside of our department, including Iowa State and outside institutions and research centers.

Objective 2: Host a symposium on emerging topics of type 2 diabetes research.

Benchmark 1: Host a symposium on type 2 diabetes research; publish proceedings in a peer-reviewed journal.

Goal 2: Development of courses in type 2 diabetes that complement our current undergraduate and graduate curricula.

Objectives and Benchmarks:

Objective 1: Develop two graduate level courses (1 or 2 credits/course) in type 2 diabetes to include in The Interdepartmental Graduate Program in Nutritional Sciences (IGPNS). Courses would include biological concepts, clinical, community, and global perspectives and could be broken into 2 separate 1 credit courses.

Benchmark: New courses created with viable enrollment.

Objective 2: Develop a basic upper level undergraduate course in type 2 diabetes for Dietetics and Nutritional Sciences majors that would include concepts such as healthy eating, sleep, stress, and behavior change.

Benchmark: Course created.

	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Goal 1: Development of a collaborative research team to conduct nutrition research aimed at the prevention and management of type 2 diabetes.					
Objective 1: Develop internal and external collaborative teams for submission of external grant proposals and research projects.					
Benchmark 1: Submit training grant proposals for funding of M.S. and/or Ph.D. students.			X	X	X
Benchmark 2: Establish new collaborations with faculty from outside of our department, including Iowa State and outside institutions and research centers.	X	X	X	X	X
Objective 2: Host a symposium on emerging topics of type 2 diabetes research; proceedings publication.					
Benchmark 1: Host a symposium on type 2 diabetes research.			X		X
Goal 2: Development of courses in type 2 diabetes that complement our current undergraduate and graduate curricula.					
Objective 1: Develop two graduate level courses (1 or 2 credits/course) in type 2 diabetes to be available for IGPNS students. Courses would include biological concepts, clinical, community, and global perspectives and could be broken into 2 separate 1 credit courses.					
Benchmark: New courses created with viable enrollment.		X			
Objective 2: Develop a basic upper-level undergraduate course in type 2 diabetes that would include concepts such as healthy eating, sleep, stress, behavior change.					
Benchmark: Course created.			x		