GREETINGS FROM THE DIRECTOR

Thank you for your interest in the work of the Healthy Foods, Healthy Lives (HFHL) Institute. Whether you know us for our annual research symposium and food summit, our faculty or community-university research grant programs, the annual Food Day event in October or our undergraduate cooking courses, we consider you a partner in our mission of increasing and sustaining the U of M’s impact in the interdisciplinary arena of food, agriculture and human health by enhancing the University’s capacity in research, learning and community engagement.

This report covers almost three fiscal years and represents a sampling of the work the Institute has led, participated in and supported from the fall of 2010 through fall 2012. During this time, the Institute expanded to place more focus on U of M students. In the fall of 2010, we released our first request for proposals (RFP) for a new Graduate and Professional Student Research Grant Program that funds research or other activities that broaden interdisciplinary learning related to food, agriculture, and health issues. After a competitive review process, we awarded over $30,000 to four dynamic student projects ranging from $4000 - $10,000. In 2011, HFHL hosted the 1st Annual U of M Food Day Event as part of a nationwide day of events aimed at highlighting and promoting healthy and sustainable food. Over 1000 students, faculty, staff and community members interacted with Food Day partners and sponsors at a food expo, attended presentations by local food experts and learned more about food and its impact on the environment. With support from CFANS through a grant to develop experiential learning courses, in the fall of 2012 we offered “FScN 2001: Healthy Foods, Healthy Lives: A Food System Approach to Cooking.” This multi-disciplinary, experiential cooking course explores strategies for understanding and navigating the food system in a way that fits into the lives of busy students and uses the kitchen as a place to bring these strategies to life. Students engage in stimulating lecture topics, participate in discussions with guest University faculty and community experts and participate in a weekly cooking lab with Jenny Breen, a nutrition professional, author and established Twin Cities chef.

Our grant programs continue to be a cornerstone of the Institute. The University Faculty Research grants fund interdisciplinary research in three priority areas: food safety, food policy, and prevention of obesity and chronic disease. Our Community-University Partnership grants fund community-university co-led projects focused on food, agriculture and community health. Between 2010 - 2012, 28 research-related grants totaling more than $3.4 million were awarded to University faculty, graduate and professional students and community-academic teams. During this period, 20 University units and 23 community partners were supported by our grant programming. A key metric of our scientific and educational impact is peer-reviewed publication and to date, over 25 publications have resulted from HFHL-funded grants. We invite you to peruse the projects that we funded between fall 2010 and fall 2012, some of which have been highlighted in this report. For more details about all of the projects we’ve supported, please visit our website at www.hfhl.umn.edu.
The Institute experienced a number of internal changes in 2012. In the spring, we brought aboard a new Program Coordinator, Jawad Towns, who manages the grant programs, symposium planning, and our communications efforts. Jawad, a graduate student in the School of Public Health’s MPH program, came to us from NorthPoint Health & Wellness Center where he served as Community Program Planner for five years. In addition to Jawad’s arrival, congratulations to Kristine Igo, who was promoted to HFHL Associate Director in recognition of her increasing responsibilities and leadership. Additionally, Kris was selected to serve on the Homegrown Minneapolis Food Council. Other significant in-house efforts included a strategic planning meeting in the summer of 2012 to engage HFHL Advisory Board members in discussion and development of operating guidelines for the Institute, as well as to begin discussion of the purpose and possible structure of an External Advisory Board.

We hope you appreciate this bi-annual report. Its title, Connecting, Educating, Transforming: Towards solutions to complex food and health problems, aptly reflects the exciting progress that marked 2010 - 2012 at HFHL. Realizing the ultimate goal of the Institute, which is to utilize and help build the strengths of the University in the area of food and health to advance scientific and public knowledge and influence public policy, will continue to require innovative, strategic partnerships, exciting educational initiatives and experiential learning opportunities for students, close interaction with external partners, and a strong focus on forging connections and communication among researchers. As ever, we are grateful to our Advisory Board members, partners, students, grantees, administrators and not least of all, our staff for their hard work and support! We look forward to the opportunities that await us.

Mindy Kurzer
Director, Healthy Foods, Healthy Lives Institute

A very special thank you to the following individuals for their invaluable contributions to HFHL programming and activities over the past few years:
MISSION & OBJECTIVES

HFHL INSTITUTE MISSION AND LONG TERM OBJECTIVES

MISSION STATEMENT
The mission of the University of Minnesota Healthy Foods, Healthy Lives (HFHL) Institute is to increase and sustain the University's impact in the interdisciplinary arena of food, agriculture and health by building the University's capacity in research, learning and community engagement. The priority areas for focus are food safety, prevention of obesity and chronic disease, and food policy. Within these priority areas, of special importance is the integration of agriculture and medicine.

CURRENT AND LONG TERM OBJECTIVES
The major goal of the HFHL Institute is to utilize and help build the strengths of the University of Minnesota in the area of food and health to advance scientific and public knowledge and influence public policy. This will be done by:

- Funding interdisciplinary research teams whose goal is the development and implementation of cutting edge extramurally funded research and training programs;
- Increasing connections and communication among researchers within the University;
- Developing cross-college programs to expand and coordinate teaching in these areas and to provide innovative training and mentoring opportunities for junior faculty, graduate and professional students and high-performing undergraduate students;
- Encouraging transdisciplinary learning, discussion, and problem solving;
- Promoting community/University partnerships to enhance community-based research and to translate University research for the benefit of Minnesota communities and to share knowledge for collaborative problem-solving; and
- Communicating University findings and their impact to the public, lawmakers and members of the agricultural, food industry and health sectors.
HEALTHY FOODS, HEALTHY LIVES
INTERNAL ADVISORY BOARD
JULY 2010 – DECEMBER 2012

SARA AXTELL, PhD
Community-Campus Health Outreach Liaison
(AHC, Extension)

JEFF BENDER, DVM
Associate Professor of Veterinary Public Health and
Director, Center for Animal Health and Food Safety (CVM)

CHARLES BILLINGTON, MD
Professor of Medicine (Endocrinology), Director of the
VAMC obesity program, and Associate Director of the
Minnesota Obesity Center (Medicine)

VINCE FRITZ, PhD
Professor, Horticultural Science and Director of Operations,
North Central Research and Outreach Center (CFANS)

DANIEL D. GALLAHER, PhD
Professor of Nutrition, FScN (CFANS)

GARY G. GARDNER, PhD
Professor, Horticultural Science (CFANS)

CRAIG HEDBERG, PhD
Associate Professor of Environmental Health Sciences (SPH)

RICHARD ISAACSON, PhD
Professor, Veterinary and Biomedical Sciences (CVM)

ROBERT W. JEFFERY, PhD
Professor, Division of Epidemiology and Community Health
(SPH) and Director, UMN Obesity Prevention Center (AHC)

SHAUN KENNEDY
Assistant Professor of Veterinary Population Medicine,
Director of the National Center for Food Protection and
Defense, and Director of Partnerships and External
Relations, College of Veterinary Medicine (CVM)

EXECUTIVE COMMITTEE:

SARA AXTELL
(Extension)

CHARLIE BILLINGTON
(Medicine)

GARY GARDNER
(CFANS)

DICK ISAACSON
(CVM)

ROBERT KING
(CFANS)

ALEX LANGE
(CBS/Medicine)

MELISSA NELSON LASKA
(SPH)

BMBB = Biochemistry, Molecular Biology and Biophysics; FScN = Food Science and Nutrition; CBS = College of Biological Sciences; SPH = School of Public Health; CFANS = College of Food, Agricultural, and Natural Resource Sciences; CVM = College of Veterinary Medicine
HEALTHY FOODS, HEALTHY LIVES
INTERNAL ADVISORY BOARD (continued)

JULY 2010 – DECEMBER 2012

ROBERT KING, PhD
Professor of Applied Economics (CFANS),
(Previous) Director, Food Industry Center

MARY JO KREITZER, PhD, RN
Director of the Center for Spirituality and Healing (AHC)

THEODORE P. LABUZA, PhD
Morse Alumni Distinguished Teaching Professor of Food Science and Engineering, Food Science and Nutrition (CFANS)

ALEX J. LANGE, PhD
Associate Professor of Medicine and BMBB
(Medicine and CBS)

MELISSA NELSON LASKA, PhD, RD
Associate Professor, Division of Epidemiology and Community Health (SPH)

SUSIE NANNEY, PhD, RD
Associate Professor of Family Medicine and Community Healthy (Medicine)

CARL J. ROSEN, PhD
Professor and Department Head,
Soil, Water and Climate/Horticultural Science (Extension/CFANS)

C. FORD RUNGE, PhD
Distinguished McKnight University Professor of Applied Economics and Director of the UMN Center for International Food and Agricultural Policy (CFANS)

RANDY SINGER, DVM, PhD
Associate Professor of Veterinary and Biomedical Sciences (CVM)

JAMIE STANG, PhD, MPH, RD
Associate Professor, Division of Epidemiology and Community Health (SPH)

MARY STORY, PhD, RD
Professor, Division of Epidemiology and Community Health and (Previous) Associate Dean (SPH)

BMBB = Biochemistry, Molecular Biology and Biophysics; FScN = Food Science and Nutrition; CBS = College of Biological Sciences; SPH = School of Public Health; CFANS = College of Food, Agricultural, and Natural Resource Sciences; CVM = College of Veterinary Medicine
HEALTHY FOODS, HEALTHY LIVES GRANT PROGRAMS

The HFHL Institute administers three grant programs. Two rounds of Requests for Proposals (spring and fall) and proposal reviews are conducted each year. The University Research Grant Program (spring) focuses on bringing together new interdisciplinary teams to perform research using cutting-edge approaches on important food and health issues. The new Graduate and Professional Student Grant Program, first announced in Spring 2011, supports student research or other activities related to expanding interdisciplinary learning and engagement in the areas of food, agriculture, and human health. The Community-University Partnerships Research Grant Program (fall) focuses on building partnerships between University and community researchers. The following are 24 innovative projects, awarded in the Spring of 2010 through the Fall of 2012 by all three grant programs, that represent the diversity and intellectual capacity on campus and in the community. For the purpose of this report, we have highlighted a select few but you are invited to visit www.hfhl.umn.edu to learn more about all of the grants that we’ve funded.

Spring 2010 Community-University Awards

SACRED FOODS EQUAL HEALTHY LIVES
Lea Foushee (North American Water Office), Craig Hassel (U of M Center for Neighborhood Organizing)
Amount Awarded: $ 48,010
Timeframe: June 2010 – December 2012
Greater availability of sacred foods represents a path to healthy lives. The past 150 years has witnessed dramatic change in the diets and lifestyle of Anishinaabe people. The highly physical hunter/gatherer lifestyle of seasonal camps and subsistence foods has given way to a dependence upon market foods, commodity foods, fast foods and inexpensive, highly palatable convenience foods. The contemporary food system has left communities within the White Earth Anishinaabe Nation (Reservation) with an abundance of cheap, calorically dense convenience foods that contribute to the persistence of diet-related chronic disease. People must now travel 20 – 50 miles to find a full service grocery store with a reasonable selection of fruits and vegetables. This project reflected a community-based approach in response to these challenges and draws upon the food-gathering heritage and Anishinaabe culture as vital resources to a recovery and restoration of health to Anishinaabe people, families and communities. Sacred Foods Equals Healthy Lives succeeded in reintroducing over 3,500 perennial berries, wild fruit bushes and fruit trees, hazelnuts, sugar maple and medicine herbs at fourteen public and private locations across Mahnomen, Clearwater and Becker Counties. This project is a culturally appropriate solution to the existing food desert conditions on the White Earth Anishinaabeg Nation.

“Sacred Foods Equals Healthy Lives was so successful White Earth community groups were calling us asking if they could be included in the project. Locations where the berries and fruits grow in the wild are closely guarded information. Our Project goal was to increase the availability and access to berries and wild fruits, via edible landscaping techniques so that larger numbers of families and community groups, especially children could enjoy the health benefits.”

— Lea Foushee
Spring 2010 Community-University Awards  continued

A CATALOG OF Hmong Medicinal Plants
Pakou Hang (Hmong American Farmers Association), Harry Boyte (U of Minnesota Humphrey School of Public Affairs)
Amount Awarded: $48,893
Timeframe: July 2010 – June 2011

Increasing Access to Healthful Foods in Low-Resource Neighborhoods through Refining Youth Farm and Market Project’s Food Distribution: A Youth Action Research Project
Gunnar Liden (Youth Farm and Market Project), Nancy Leland (U of M Healthy Youth Development - Prevention Research Center)
Amount Awarded: $47,284
Timeframe: July 2010 – June 2011

Little Earth Food Justice and Youth Empowerment Project (Year 2)
Lucy Arias (Little Earth of United Tribes), Jay Clark (U of M Center for Neighborhood Organizing)
Co-Investigator: Margaret Kaplan (MN Center for Neighborhood Organizing)
Amount Awarded: $49,998
Timeframe: June 2010 – March 2012
PREVALENCE AND MOLECULAR EPIDEMIOLOGY OF CLOSTRIDIUM DIFFICILE IN FOOD AND COMPANION ANIMALS, RETAIL MEATS, AND HUMANS IN MINNESOTA

James R. Johnson (Division of Infectious Diseases and International Medicine, Medical School)

Co-Investigators: Stacy Holzbauer (MN Department of Health), Kirk Smith (MN Department of Health), Jeff Bender (U of M Center for Animal Health and Food Safety, CVM), Francisco Diez-Gonzalez, (Department of Food Science and Nutrition, CFANS), Megan Shaughnessy (Department of Medicine, Medical School)

Amount Awarded: $100,000

Timeframe: March 2011 – March 2014

Clostridium difficile (CD) infection (CDI) is an increasingly frequent and severe illness among humans. A growing fraction of CDI cases occurs in the community and involves individuals who lack traditional risk factors for CDI, such as antibiotic use and healthcare exposure. This, plus sporadic reports of recovery of CD from food animals, companion animals, and retail meats, suggests a possible zoonotic or foodborne component to the current CDI epidemic. To gain insights into this possibility, this project: (i) screened diverse Minnesota food animals, companion animals, plus locally purchased retail meat products, for CD; (ii) compared prevalence values across animal species and meat types, in relation to production methods, especially antibiotic exposure; and (iii) molecularly typed the isolates, then compared the genotypes of animal-source and food-source isolates with those of human clinical CD isolates from the Minnesota Department of Health’s ongoing population-based CD surveillance in central Minnesota. The study’s findings will provide novel insights into the possibility of zoonotic or foodborne transmission of CD to humans in Minnesota.

“HFHL funding has helped us to uniquely contribute to advancing research in our field by supporting the first-in-Minnesota survey for CD in food animals and retail foods, and one of the first comparison of temporally and geographically matched CD isolates from humans and animals.”

—Dr. James Johnson

Fall 2010 University Research Grants

HYPOALLERGENIZATION OF SOY PROTEIN USING A COMBINATION OF ENZYMATIC HYDROLYSIS AND SPONTANEOUS MAillard CONCATULATION

Baraem (Pam) Ismail (Department of Food Science and Nutrition, CFANS)

Co-Investigators: P. Srima Rao (Department of Veterinary and Biomedical Sciences, CVM), Malcolm Blumenthal (Departments of Medicine and Pediatrics, Medical School)

Amount Awarded: $99,984

Timeframe: March 2011 – December 2013

EVIDENCE TRANSLATION FOR CHILDHOOD OBESITY PREVENTION IN MINNESOTA

Sarah E. Gollust (Division of Health Policy and Management, School of Public Health), Marilyn S. Nanney (Department of Family Medicine and Community Health, Medical School)

Co-Investigators: Karen Cadigan (U of M Children, Youth, and Family Consortium, Medical School), Rachel Callanan, (American Heart Association), Susan Weisman (Public Health Law Center)

Amount Awarded: $93,306

Timeframe: March 2011 – August 2013

Clostridium difficile bacteria
**Funding Student Research**

**Spring 2011 Graduate and Professional Student Research Grants**

**Effect of Conjugation on Bio-Availability of Soy Isoflavones**

Vamsidhar Yerramsetty (Department of Food Science and Nutrition, CFANS)

Faculty Advisor: Baraem (Pam) Ismail (Department of Food Science and Nutrition, CFANS)

Amount Awarded: $9,958

Timeframe: March 2011 – March 2012

**Impacts of Mandatory Calorie Posting in Restaurant Chains: How Do Menus Change?**

Alison Sexton (Department of Applied Economics, CFANS)

Faculty Advisor: Timothy Beatty (Department of Applied Economics, CFANS)

Amount Awarded: $6,811

Timeframe: March 2011 – March 2012

**Food Habits Research and the History of American Food Policy, 1930-1970**

Michael Wise (Department of History, CLA)

Faculty Advisors: Susan D. Jones (Department of Ecology, Evolution, and Behavior, CLA) and David Chang (Department of History, CLA)

Amount Awarded: $4,722

Timeframe: June 2011 – August 2012

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**Can We Really Reduce the Salt? Use of Difference Thresholds and Repeated Eating Experiences to Determine Acceptability of a Low Sodium Food**

Nuala Bobowski (Department of Food Science and Nutrition, CFANS)

Faculty Advisor: Zata Vickers (Department of Food Science and Nutrition, CFANS)

Amount Awarded: $10,000

Timeframe: March 2011 – May 2012

The purpose of this project was to compare the effectiveness of abrupt versus gradual salt reduction strategies over a 16 week period in terms of consumer acceptability of a food (tomato juice) reduced in salt to a low sodium target, and to determine whether an individual’s motivation to reduce personal dietary salt intake had any impact on acceptability. Results from this study suggest that it may be possible to reduce salt in a food within the context of a high salt diet without impacting consumer acceptability, but that liking for higher salt foods may remain unaffected—a finding that could be a potential challenge in attempting to adjust a population’s salt preference.

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Where is 2011 HFHL Student grantee, Nuala Bobowski now?

Since receiving HFHL funding, Dr. Nuala Bobowski was recipient of the Rose Marie Pangborn Sensory Science Scholarship, an international honor awarded annually to one individual with a commitment to sensory research and education. Currently, Bobowski is a Postdoctoral Fellow at the Monell Chemical Senses Center, the only independent non-profit research center completely dedicated to research on taste and smell.

“I am absolutely positive that I would not be in this position, working with an internationally-renowned expert on eating behavior of children, if I had not been a grant recipient as a graduate student. HFHL funding truly set the stage for continued research opportunities.”

—Nuala Bobowski

Where is 2011 HFHL Student grantee, Vamsi Yerramsetty now?

After being awarded a HFHL Graduate and Professional Student Research Grant in the spring of 2011, Dr. Vamsidhar (Vamsi) Yerramsetty has published two papers directly related to the grant—one in the Journal of Agricultural and Food Chemistry and the other in the Journal of Nutrition. Most recently, Yerramsetty was accepted to the 2014 Teach for India Fellowship program.

“The seed money provided by HFHL for my PhD research in the form of a student research grant was instrumental in obtaining relevant results and getting my work published in reputed journals. It certainly helped in the evolution of my research from a nascent stage to one that currently possesses tremendous scope.”

—Vamsi Yerra
Fall 2011 Community-University Partnership Research Grants

HARVESTING HEALTHIER FOOD: A PROGRAM OF SAFE FOOD HANDLING PRACTICES FOR IMMIGRANT FARMERS
Hli Xyooj (Farmers’ Legal Action Group, Inc.), Ly Vang (Association for the Advancement of Hmong Women in Minnesota), Michele Schermann (Department of Bioproducts and Biosystems Engineering, CFANS)
Amount Awarded: $49,991
Timeframe: August 2011 – August 2012
The goal of this project was to increase the knowledge and skills regarding on-farm food safety for Hmong farmers in the Twin Cities region. A key aspect of the success of this project was the development of a core group of Hmong vegetable farmers, or an advisory board, who were provided with training, hands-on skill building and networking opportunities over the course of one year with the goal of increasing their knowledge, interest and skills relating to on-farm food safety practices. Advisory members closely assisted project staff in the development of educational and curriculum materials, planned on farm safety trainings and engaged in outreach activities in the Hmong community to raise awareness of trainings. One of the most important intangible benefits of this project was that it encouraged immigrant farmers in listening, responding and creating opportunities for themselves to voice their knowledge, wisdom, and stories, as well as recognize their hard work of producing fresh fruits and vegetables as healthy additions to the Twin Cities region’s diet.

“Previously, I haven’t learned about such thing as GAPs (good agricultural practices). It was great that I was able to work with Hli Xyooj, Michele, Anna, and Palee together in learning more about GAPs. This has really helped me in many great ways. I am glad that they have taught and showed me the way to not only improve my knowledge, but also proved to others that I completed some GAPs training. This project was another way of helping me to better improve my skills, farm, and overall marketing.” —Mrs. Nancy Lee, Farmer Advisory Committee Member for Harvesting Healthier Food Project

GOOD HEART GROCERY AND EAT RIGHT DELI COMMUNITY ASSESSMENT & STRATEGIC PLAN: IHANKTONWAN DAKOTA COMMUNITY, SD
Faith Spotted Eagle (Brave Heart Society), Tiffany Beckman (Department of Medicine, Medical School)
Amount Awarded: $50,000
Timeframe: July 2011 – March 2013

GOOD FOOD, GOOD FATHERING
Clarence Jones (Southside Community Health Services), Shelley Sherman (U of M Extension)
Co-Investigator: Terry Straub (Hennepin County)
Amount Awarded: $ 37,424
Timeframe: July 2011 – August 2012

RESTORING OUR TRADITIONAL FOODS: AN ANISHINAABEG FARM AND GARDEN CURRICULUM
Winona LaDuke (White Earth Land Recovery Project, Mississippi Band Anishinaabeg), Sandy Olson-Loy (U of M Morris Student Affairs)
Co-Investigators: Lauren Scott (White Earth Land Recovery Project, Mississippi Band Anishinaabeg), Mary Jo Forbord (Morris Healthy Eating, UMM), Margaret Kuchenreuther (Department of Biology, UMM), Sheri Breen (Department of Political Science, UMM)
Amount Awarded: $49,674
Timeframe: October 2011 – October 2013

BODY AND SOUL FOR KWANZAA’S NORTHSIDE COMMUNITY
Kevin L. Gilliam II (NorthPoint Health & Wellness Center), Jennifer A. Linde (Division of Epidemiology and Community Health, School of Public Health)
Amount Awarded: $50,000
Timeframe: July 2011 – June 2012
Spring 2012 University Research Grants

HEALTHY WEIGHT MANAGEMENT IN DIVERSE YOUTH:
A HEALTH CARE HOME APPROACH
Jerica M. Berge (Family Medicine and Community Health, Medical School) and Dianne Neumark-Sztainer (Epidemiology and Community Health, School of Public Health)
Co-Investigator: Shailendra Prasad (North Memorial Family Medicine Residency)
Amount Awarded: $50,000
Timeframe: August 2012 – November 2014
The purpose of this study is to develop and test a novel paradigm for a family-based primary care approach to healthy weight management in underserved youth. The intervention, Umatter (i.e., You matter), was designed to enhance personal strengths of youth. The approach aims to help young people feel good about themselves and their bodies so that they will avoid short-term dieting and, instead, will integrate healthy eating and physical activity behaviors into their lifestyles on a long-term basis. The study is being implemented at Broadway Family Medicine Clinic, a large primary care clinic in North Minneapolis. The intervention was developed based upon input that was collected from parents and youth from the local community and from clinic staff. Furthermore, the Clinic Advisory Board is involved with program development and implementation in order to ensure that the program meets the community’s needs.

EFFECTS OF FERMENTED WHEAT BRAN ON GUT MICROFLORA AND IMPLICATIONS FOR OBESITY
Andrea Y. Arikawa (Department of Food Science and Nutrition, CFANS)
Co-Investigators: Ryan Fink (Department of Food Science and Nutrition, CFANS), Daniel Gallaher (Department of Food Science and Nutrition, CFANS), Mirko Bunzel (Karlsruhe Institute of Technology - Karlsruhe, Germany)
Amount Awarded: $93,939
Timeframe: August 2012 – September 2014
Little is known about how bioactive compounds in wheat bran affect the composition of the gut microflora, or how microbial metabolites of wheat bran affect obesity-related parameters. Unraveling the mechanisms by which wheat bran and whole grains promote health is essential to promoting whole grain consumption as well as developing new health claims. It is also important to determine the contribution of the gut microflora to the development of obesity and related diseases, because there is accumulating evidence showing alterations in the gut microflora with different disease states. This project aims to determine the effects of fermented wheat bran on the composition of the gut microflora and its relationship with obesity-related parameters in diet-induced obese rats.

REDUCTION IN COLONIC CANCER
STEM CELL FORMATION BY CRUCIFEROUS VEGETABLES IN MICE
Daniel D. Gallaher (Department of Food Science and Nutrition, CFANS) and Sabrina P. Trudo (Department of Food Science and Nutrition, CFANS)
Co-Investigator: Subbaya Subramanian (Department of Surgery, Medical School)
Amount Awarded: $49,942
Timeframe: August 2012 – August 2013
The reduction in colonic cancer is well-documented, but the mechanism is not clearly understood. The mechanism of stem cell formation by cruciferous vegetables is also not well understood. This project aims to determine the role of cruciferous vegetables in the reduction of colonic cancer by studying stem cell formation in mice.
FUNDING CROSS-DISCIPLINE, CROSS-SECTOR RESEARCH TEAMS

Fall 2012 Community-University Partnership Research Grants

STRESS REDUCTION THROUGH HEALTHY LIFESTYLES IN THE KWANZAA NORTHSIDE COMMUNITY (YEAR 2)
Kevin L. Gilliam II (NorthPoint Health & Wellness Center), Jennifer A. Linde (Epidemiology & Community Health, School of Public Health)
Amount Awarded: $50,000, Year-two award
Timeframe: January 2013 – January 2014
Building on the year one Body and Soul program which focused on food, nutrition and health, Kwanzaa Community Church and their University of Minnesota partner leveraged success from the initial phase of their efforts by shifting focus to stress, another critical issue of importance to African-American communities. Activities included children and adults and focused on mindfulness-based education, peer counseling to promote lifestyle changes, and inclusion of local community partners in stress management programs. Outcomes that were measured included changes in perceived stress, health-promoting behavior changes, program participation, and qualitative feedback on program offerings. Project results will contribute to the long-term health and well-being of the Kwanzaa community and its neighboring partners.

HEALTHY CHOICES CAMPAIGN: IMPLEMENTING HEALTHY MENU OPTIONS FOR TRADITIONAL MEXICAN FOOD CONSUMED IN MINNEAPOLIS AND ST. PAUL RESTAURANTS
Julieta Parra (Latino Economic Development Center), Kendra Kauppi (Department of Food Science and Nutrition, CFANS)
Co-Investigators: Marla Reicks (Department of Food Science and Nutrition, CFANS), Claudia Diez (Department of Food Science and Nutrition, CFANS)
Amount Awarded: $50,000

Harvesting Healthier Food II: Advancing a Singular Program of Safe Food Handling Practices for Immigrant Farmers (Year 2)
Hli Xyooj (Farmers’ Legal Action Group, Inc.), Michele Schermann (Department Bioproducts & Biosystems Engineering, CFANS)
Co-Investigator: Annalisa Hultberg (Department of Bioproducts & Biosystems Engineering, CFANS)
Amount Awarded: $50,000, Year-two award
NEXT STEPS: A COMMUNITY-LED SOLUTION TO SUSTAINING HEALTHY BEHAVIORS IN FAMILIES ADDRESSING CHILDHOOD OBESITY

Aurolivia Reyes (Taking Steps Together), Natividad Contreras (Taking Steps Together), Maria Galvan (Taking Steps Together), John D. Anderson (Department of Pediatrics, U of M Medical School and Hennepin County Medical Center), Chrisa Arcan (Division of Epidemiology and Community Health, School of Public Health)

Co-Investigators: Rachel Newby (Hennepin County Medical Center), Maria Zavala (The Family Partnership of Minnesota)

Amount Awarded: $49,454

Timeframe: March 2013 – March 2014

FRESH START GARDEN PROJECT: A COMMUNITY-BASED PARTICIPATORY RESEARCH APPROACH TO AN INTERGENERATIONAL AND HOLISTIC GARDEN AND COOKING PROGRAM IN NORTH MINNEAPOLIS

Michelle Horovitz (Appetite for Change), Tracy Bradfield (U of M Center for Early Education and Development, CEHD)

Amount Awarded: $49,994

CO-SPONSORED HFHL EVENTS AND ACTIVITIES

2010

National Agricultural Biotechnology Council (NABC) Conference at UC-Davis, June 2010 - Attendee
Grains for Health Foundation - The Future of Grains in Schools: Tipping the Scales toward a Healthier Food Supply, June 2010 - Co-sponsor of event and member of the conference organizing committee
Local Foods Workshop October 6, 2010 – Workshop on findings and lessons from HFHL Board member Rob King’s USDA study - Co-sponsor with Food Industry Center and FScN

2011

Community Food Security Coalition Food Policy Conference, Portland, OR, May 2011 - Attendee
National Agricultural Biotechnology Council (NABC) Conference, Blooming-ton, MN, June 2011 - Event sponsor and attendee
PolicyLink Equity Summit, Detroit, MI, November 2011 - Attended as a member of a broad Minnesota coalition representing equity issues across a variety of public sectors
Community Open House for the 5th Anniversary of the University of Minnesota Medical School’s Program in Health Disparities Research, UMN, April 2011 - Participant organization in event that highlighted local community organizations and researchers working to reduce and eliminate health disparities

2012

Whole Grains Summit, Minneapolis, MN, May 2012 - Event co-sponsor and co-planner
Local Foods Community-University Networking Gathering at the U of M Office of Public Engagement’s Leaders Retreat, Minneapolis, MN, May 2012 - Event facilitator and co-sponsor allowing University researchers to network and discuss potential research projects and potential partnerships on local foods work
Minneapolis Public Schools Annual Back-to-School BBQ, September, 2012 - Event sponsor and organizational participant
Homegrown Minneapolis Annual Community Engagement Event, December, 2012 - Event sponsor and organizational participant
ENCOURAGING TRANS DISCIPLINARY LEARNING, DISCUSSION, AND PROBLEM SOLVING

2010 – 2012 HFHL SYMPOSIA

Three Research Symposia Explore Current Issues in Food & Health

During the fall semesters of 2010–2012, HFHL co-hosted three enlightening two-day research symposia and food summits, in partnership with the University’s Minnesota Landscape Arboretum, for the purpose of engaging and educating faculty members, students, and community members on interdisciplinary scientific and policy issues related to food and health.

In the fall of 2010, The Food for Thought Summit presented emerging scientific research that gave insight into the importance of plants for human health. The summit’s first day, themed “Plant Foods for Human Health” included nationally renowned scientists from both the academic and public policy worlds who gave updates on their latest research and case studies on the factors that can help motivate people to improve their health by eating more plants. The keynote presenter to wrap-up the day 1 program was New York Times food columnist and author Mark Bittman, who gave a presentation titled, “Communication Matters: Rethinking Nutrition & Scientific Messaging from a Journalist’s Perspective.”

The day 2 program located on the pristine grounds of the Minnesota Arboretum in Chaska, titled “Pack Your Menu with Powerhouse Plants,” provided an opportunity to translate the research presented on day 1 into practical advice for attendees on how they could incorporate more plants into their diet. Attendees learned from professionals who work in schools, healthcare organizations, community centers and neighborhood settings about how they increased the presence of healthful edible plants in their institutional menus and their group members’ diets. Presenters provided case studies and described how time and funds were found to implement these diet changes.

The third annual 2011 fall symposium and food summit, “Optimizing Food Systems for Human Health,” examined the health impacts of various food system practices, from production, through processing, food manufacturing, distribution and consumption. The summit sought to identify critical points in the food system where intervention improves human health, through an exploration of both conventional and sustainable food system approaches. The goal of the summit was to find common purpose, presenting research and best practice case studies that represent the innovative integration of human health research and food system decision-making. Speakers brought together knowledge and expertise from public health, medical science, environmental and natural resource sciences, production agriculture, business and public policy to provide a framework for coordinated, collaborative research and policy.

The day-one symposium focused on the research side of these issues, with academic presentations by experts from across the globe and representing academia, government, industry, and non-governmental organizations. The keynote speaker was Dr. Juan Rivera, the Founding Director of the Center for Research in Nutrition and Health at the National Institutes of Public Health and a Professor of Nutrition in the School of Public Health of Mexico. Dr. Rivera’s presentation, “The Global Nutrition Transition from Under-Nutrition to Obesity – Can it be Prevented?” gave insight into the Mexican government’s efforts in implementing a national, multisectorial strategy for the prevention of obesity. One of Mexico’s promising goals and actions, as described by Dr. Rivera, included the regulation of food and beverages in schools.

The day-two keynote address was delivered by esteemed author and Fair Food Network CEO, Dr. Oran Hesterman, who spoke about the challenge of making fair food a fundamental right. “Everyone should have the right to healthy food, just as they should have the right to a good education for their children and access to adequate healthcare,” contended Hesterman. The day-two program engaged
summit-goers on how numerous communities had developed creative strategies to improve their own food environments and what various sectors were doing to support improved health outcomes across all populations. Industry representatives from Cargill, Malt-O-Meal and Thousand Hills Cattle were present and joined a panel consisting of producers, academia, city government and institutional leaders in a discussion on how the food system can improve the lives of their consumers, community members and constituencies.

In 2012, “Minnesota Leaders in Food and Health,” the day 1 research symposium highlighted and showcased award-winning research led and conducted by world-renowned, award-winning University of Minnesota faculty members in food, health, and agricultural sciences. The intended outcome was for attendees to be more informed about the impact and contributions that homegrown research is having on improving the lives of not only Minnesotans but people around the globe. University scientists presented cutting-edge research and shared their findings and perspectives on various topics along the farm to fork continuum. Attendees heard from Drs. Marla Spivak and Linda Halcón and learned how honey bees impact human health. Drs. Michael Osterholm and Francisco Diez-Gonzalez presented on key food safety and protection issues; Drs. Allen Levine and Simone French discussed the neural regulation of food intake as well as the environment and their relation to obesity; and Drs. Stephen Hecht and Vince Fritz closed out day 1 with a discussion around the role of food compounds in preventing cancer.

On the evening of day one, a special event was held at the University’s Urban Research and Outreach-Engagement Center (UROC) in North Minneapolis where chef, food justice activist, and author of three cookbooks Bryant Terry, gave a lively and inspirational presentation in which he discussed food justice, the roles that faith-based communities and youth could play in the food movement and the diversity and complexity of black “soul” food in America—an Afro-derived diet consisting of starches, proteins and leafy greens such as yams, legumes and beans, and collards, just to name a few.

Terry was the day two keynote and presented his clear view and keen insights into healthful food access and food justice issues. Arboretum guests were entertained as well as informed about the urban agriculture movement as Terry demonstrated a simple, inexpensive, vegan dish while he told his background story. Attendees heard from community leaders in Minnesota who are making changes in the food system and who are bringing healthy foods to entire communities in new, more sustainable ways. Attendees also had an opportunity to hear from inspiring hometown youth who gave presentations on how they brought healthful food into their communities and used it as a basis for a business.
Aside from facilitating authentic place-based partnerships and research collaborations, HFHL actively strives to promote University-community programming that seeks to increase awareness of food issues and improve health outcomes for Minnesota residents, whether they are students, University of Minnesota faculty and staff, or external community members. HFHL sees the University as an active member of the local community and looks for opportunities to involve University students and faculty in support of agricultural, food and health efforts. U of M Food Day is one of those efforts.

On October 24, 2011, HFHL was proud to host the first annual Food Day event at the University of Minnesota, part of a nationwide day of events celebrating the issues of food. Over 1,000 students, faculty, staff and community members attended the various Food Day activities throughout the day. A team of interdisciplinary University students, faculty and staff partnered to plan a full day of festivities in celebration of the event, including a Food Expo, a Good Food rally, presentations, a panel discussion and a film. In the week leading up to the event, over one hundred Food Day supporters shared their answers on the Food Day Facebook page to the question “What does good food mean to you?” Participants were entered into a drawing to win a Whole Foods gift card. A few of the thoughtful and inspiring answers included:

“Good food is that which was “meant to be;” Food that naturally grows, takes effort to harvest, and in the process, builds community! Mmmmm...” - Melissa

“Good food means beautiful food, which means beautiful insides, which means beautiful outsides. You can see the glow of good nourishment from within someone just by looking at them! And when you talk to them, they are satisfied. Satisfaction is the best side-effect to eating real, good food.” - Leslie

The Food Expo was held in the Great Hall of Coffman Memorial Union and showcased more than forty campus and community organizations involved in food work, emphasizing how attendees could get involved and make a difference. Highlights of the Food Expo included food samples and the chance to win a variety of prizes, from cookbooks to coffee to crockpots. Speakers included Minneapolis councilmember Cam Gordon, U of M Senior Vice President Robert Jones, and HFHL Director Mindy Kurzer who led the Good Food Rally, discussing local food-related initiatives in the community and encouraging students and community
members to get involved. Council Member Gordon presented the official Food Day proclamation, signed by Mayor RT Rybak of Minneapolis and St. Paul Mayor Chris Coleman, declaring October 24th as annual Food Day in the Twin Cities. Wonderful food was provided by local businesses Birchwood Cafe and Common Roots Cafe.

Also running throughout the day were a variety of presentations and cooking demonstrations open to everyone, held in both the Campus Club and the Great Hall. The Food Expo wrapped up with a panel discussion focusing on opportunities for more collaboration and interdisciplinary work around food issues. The final event of the day, however, was the screening of “Dirty Work: The Story of Elsie’s Farm”, a film about a year in the life of an organic farm in Wisconsin. The film maker and others involved with Elsie’s Farm discussed their experiences after the film and took questions from the audience.

Building on the success of the previous year’s event, Food Day 2012 at the University was two full-days of events, presentations, symposiums, and eating. This time University students took the lead in organizing activities. With support from HFHL, U Students Like Good Food, a student organization that strives to empower students to unite the community around good food and to bring light to the effect food choices have on resources, jobs and land, made the 2nd Annual Food Day a huge success.

October 23rd, themed, “Food good for eating” was dedicated to “getting to know” food, and was held in the Great Hall of Coffman Memorial Union. Day 1 featured more than 30 tables from community and University organizations on topics ranging from health and nutrition, to industry, sustainability and farming. A great lunch from Good Food Catering was accentuated by a cooking demo by local chef Jenny Breen.

October 24th, themed “Food good for thinking” turned away from the expo style format and featured a research symposium from the U of M’s Regional Sustainable Development Partnerships, student-led “lightning talks” and a keynote presentation titled, “Can We Feed the World Without Destroying It?” by Dr. Jon Foley, Director of the Institute on the Environment.
NEW COURSE AVAILABLE TO UNIVERSITY UNDERGRADUATES

In 2012, as part of CFANS effort to increase experiential and interdisciplinary learning opportunities for students, HFHL received a development grant of $55,000 to create this new course and offset the first year operational costs.

FScN 2001: Healthy Foods, Healthy Lives Cooking Course: A Food System Approach to Cooking

INSTRUCTORS
Mindy Kurzer, PhD; Kristine Igo, MPP; Chef Instructor Jenny Breen, MPH

COURSE DESCRIPTION
Offered every Spring semester, FScN 2001: A Food System Approach to Cooking provides students with the knowledge, critical thinking and technical skills necessary to make food choices based on nutritional, environmental, and local and global societal issues. Students are challenged to consider their food choices as both influencing and being influenced by larger food system dynamics and to view these issues from multiple perspectives. Through lectures, classroom discussions, and a cooking laboratory, students learn about the issues from the instructors and expert guest lecturers representing multiple disciplines such as plant, animal and environmental sciences, public health and nutrition, anthropology, geography and sociology, economics and public policy, as well as non-academic professionals and community members. The cooking laboratory provides students with a hands on opportunity to apply this knowledge to their own food choices and build skills and confidence in food preparation. Assignments include reading peer-reviewed articles on the topics to be discussed, writing, home meal preparation, as well as small group activities (resource projects, online blogs, documented field trips, etc.). Through these assignments, students learn to think critically about our food system and their own food choices, learn basic cooking skills, and create resources related to healthy food that will be useful to themselves as well as to other university and community members. This course provides Experiential Learning credits for Nutrition students.

Here’s what one student had to say:
“As a nutrition undergrad, Food Systems Approach to Cooking was definitely one of the best courses I have gotten to take at the University of Minnesota thus far. It provided me with a broader perspective on how vastly complex our food system is while also giving me useful contacts and knowledge that could be applied outside of the classroom. In discussion students got to make connections with different experts in the many different facets of the food system and challenged to reflect on the impact of their food choices as well. In lab we got to channel the knowledge we had gained in discussion and created meals that were not only rich in flavor but in good company and conversation as well. I highly recommend this course to any student who has interest in learning more about where their food comes from or who just loves really good food.” —Rachel Weidt, Nutrition student
HFHL GRANTEE PUBLICATIONS AND PRESENTATIONS

Sharing findings from HFHL funded research is a critical component of the Institute’s work. Below is a select list of article, presentation, and publication contributions by HFHL researchers to the Institute’s goal of advancing scientific and public knowledge and informing public policy as it relates to food and health.

SELECT CONTRIBUTIONS FROM 2010 GRANTEES

Evidence Translation for Childhood Obesity | Sarah E. Gollust & Marilyn S. Nanney
Publication and Project Presentation: Uses of Research Evidence in the State Legislative Process to Promote Active Environments in Minnesota – American Journal of Health Promotion, 2014; Active Living Research Annual Conference, February 2013, Hanna Kite, MPH

Prevalence and molecular epidemiology of Clostridium difficile in food and companion animals, retail meats, and humans in Minnesota | James Johnson

Hypallergenization of Soy Protein Using a Combination of Enzymatichydrolysis and Spontaneous Maillard Conjugation | Baraem (Pam) Ismail

SELECT CONTRIBUTIONS FROM 2011 GRANTEES

Good Heart Grocery and Eat Right Deli Community Assessment & Strategic Plan: Ihanktonwan Dakota Community, SD | Faith Spotted Eagle & Tiffany Beckman

Harvesting Healthier Food: A Program of Safe Food Handling Practices for Immigrant Farmers | Hli Xyooj, Ly Vang, and Michele Schermann
Demonstration: Advisory Farmers demonstrated handwashing station and shared with conference attendees the importance of hand-washing along with answering questions, Immigrant and Minority Farmers Conference, February 2013

Effect of Conjugation on Bioavailability of Isoflavones | Vamsidhar Yerramsetty
Publication: Malonylglucoside conjugates of isoflavones are much less bioavailable compared with unconjugated -glucosidic forms in rats. Journal of Nutrition, 2014

SELECT CONTRIBUTIONS FROM 2012 GRANTEES

Effects of Fermented Wheat Bran on Gut Microflora and Implications for Obesity | Andrea Arikawa
Poster Presentations: Experimental Biology Conference, April 2014 and American Society for Microbiology General Meeting, May 2014

Healthy Weight Management in Diverse Youth: A Health Care Home Approach | Jerica M. Berge & Dianne Neumark-Sztainer
Poster Presentations: Collaborative Healthcare Association Conference, October 2013 and Society of Teachers of Family Medicine, May 2014

Fresh Start Garden Project: A Community-Based Participatory Research Approach to an Intergenerational and Holistic Garden and Cooking Program in North Minneapolis | Michelle Horovitz & Tracy Bradford
Project Presentation: Lessons of Partnership from a Preschool Garden, in North Minneapolis, Arboretum Schoolyard Gardens Conference, February 2014
COMMUNICATING UNIVERSITY FINDINGS

HFHL INSTITUTE PUBLICATIONS AND PRESENTATIONS

During 2010 – 2012, the Healthy Foods, Healthy Lives Institute was responsible for a number of publications and presentations regarding food, agriculture, and health. The following is a select list of our work:

2010

Association of Public and Land-grant Universities, Experiment Station Committee on Organization and Policy—Science and Technology Committee, "A Science Roadmap for Food and Agriculture," (November 2010) Mindy Kurzer & Kris Igo co-authored section titled, “Grand Challenge 5: We must improve human health, nutrition, and wellness of the U.S. population.” Kurzer invited to speak on urban food systems at annual meeting.


Justin Bieber, Sane Eating, and Soda Tax: Mark Bittman Makes an Impression at the Healthy Foods Summit in Minnesota (Simply, Good and Tasty, 10/2010)

2011

Sustainable Agriculture & Food Systems Funders (SAFSF) 9th Annual Forum, Minneapolis, MN (June 2011) Workshop co-presentation by Kris Igo & grantee David Abazs, “Effective food systems funding: Funding sustainable farming projects that create positive economic and health outcomes”

Park Nicollet’s International Diabetes Center Annual Symposium for Advanced Diabetes Educators, Minneapolis, MN (April 2011) Kris Igo presentation titled, “The Importance of Food Systems Thinking in the Promotion of Healthy Diet Change.”

2012

Grains for Health Foundation white paper titled, “Whole Grains in Schools: A Supply Chain Approach” (May 2012) Participated on the Future of Grains in Schools Task Force and Kris Igo co-authored the white paper which examines the relationships of a sampling of stakeholders of the grain-based foods supply chain, namely growers, manufacturers, distributors, and school foodservice, as they work together to ensure the smooth and seamless delivery of whole grain foods into schools.

Taku, K., Melby, M. K., Kronenberg, F., Kurzer, M.S., Messina, M. (2012). Extracted or synthesized soybean isoflavones reduce menopausal hot flash frequency and severity: systematic review and meta-analysis of randomized controlled trials. The Journal of the North American Menopause Society, 19(7), 776-790. Mindy Kurzer co-authored a study about the benefits that soy foods can provide for women experiencing menopausal hot flashes, was recently published in the Journal of the North American Menopause Society. A comical reference to the study was made by Jay Leno during his opening monologue on the April 9, 2012 Tonight Show.
HEALTHY FOODS, HEALTHY LIVES…
By the Numbers, 2010 - 2012

GRANT PROGRAMS, 2010 - 2012
$1,200,845.00  Total grant funds administered
$4,387,508.00  Total grant funds requested
26  Total number of students funded through HFHL grants
20  Number of University units receiving grant funds
23  Number of Community partners receiving grant funds

SYMPOSIA, 2010 - 2012
$82,950  Total sponsorship funds raised
48  Academic, government, industry and community expert presenters
1,514  Total number of attendees, two days

FOOD DAY, 2011 - 2012
$5,700  Total sponsorship funds raised
72  Number of organizations represented at the Expo
2,000  Estimated number of event attendees