



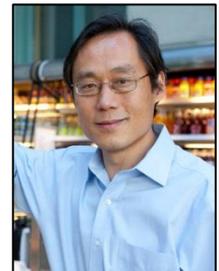
NUTRI NEWS

The Department of Nutrition

January 2017

FRANK HU BECOMES NEW DEPARTMENT CHAIR

On January 1, 2017, **Frank B. Hu, MD, MPH, PhD**, Professor of Nutrition and Epidemiology, started his new role as Chair of the Department of Nutrition, succeeding **Walter Willett, MD, MPH, DrPH**, who has served as Chair of the Department since 1991. *NutriNews* interviewed both Drs. Hu and Willett about the transition.



Q: Dr Hu, you must be very excited about your new role at the Harvard Chan School. Can you tell us what you envision for the Department in this new role?

Yes, I'm very excited about my new role. It is a tremendous honor for me to succeed Walter as he is a world-renowned scientist who has transformed the field of nutritional epidemiology and our department. As the new Chair, I want to continue and grow the strong legacy of our department. Most importantly, we will continue our efforts to maintain the preeminence of our research and educational program. In particular, we need to strengthen and expand our key research areas: nutritional biochemistry and metabolism, nutritional epidemiology, public health nutrition, and global nutrition. Toward this goal, we plan to recruit several new faculty members in our priority research areas over the next several years. In addition, we will expand our educational programs to train the next generation of nutritional researchers and practitioners. In fact, we are in the planning stage to develop a Masters program in nutrition. Last but not least, we plan to develop a school-wide program that integrates research and educational activities surrounding food, nutrition, and human and planetary health.

Q: Can you tell us a little about your background and where you came from before joining our faculty as Assistant Professor in 1999?

I completed my medical training at Tongji Medical University (now Tongji Medical College of Huazhong University of Science and Technology) in Wuhan, China in 1988. Then, I worked as a research associate at National Institute of Health Education, Beijing, China for two years. Before coming to the US, I was a visiting scholar at the University of Hong Kong and the Dutch Center for Health Promotion and Disease Prevention in the Netherlands. I was enrolled in a graduate program in epidemiology at the University of Illinois at the Chicago School of Public Health in 1991 and received a PhD in Epidemiology in 1996. I started a postdoctoral fellowship in nutritional epidemiology with Walter as my primary mentor after completing my degree.

Q: How has your work progressed since then?

As a postdoc, I was fortunate to work on several ongoing, large cohort studies including the Nurses' Health Study and the Health Professionals' Follow-up Study. These cohorts have provided unparalleled resources for conducting nutritional epidemiologic studies. More importantly, our department and the Channing lab provide intellectually stimulating and supportive environments for young investigators to grow and develop independent careers. I was very lucky to work with several mentors. In addition to Walter, I have also worked closely with Drs. Meir Stampfer and JoAnn Manson and many other

outstanding colleagues at HSPH and Channing lab. After finishing my postdoctoral training, I became an Assistant Professor in the Department of Nutrition at HSPH in 1999 and was promoted to Associate Professor of Nutrition and Epidemiology in 2002. I became a tenured Professor of Nutrition and Epidemiology at HSPH in 2008 and Professor of Medicine at Harvard Medical School in 2009.

Q: What directions do you see in the foreseeable future, both in terms of your own research and for the Department as a whole?

My own research has focused on the dietary, lifestyle, metabolic, and genetic determinants of obesity and cardiometabolic diseases. We are currently integrating cutting-edge omics technologies into observational cohorts and intervention trials using the Systems Epidemiology approach. In addition, we have been collaborating with researchers from China and India to conduct epidemiologic studies and intervention trials to examine dietary factors and diabetes prevention. Given my increasing administrative responsibilities as Chair of our department, I will need to make some adjustment in my own research portfolio, but I hope to maintain and strengthen some of my key research projects.

As for our department, it is critical for us to stay at the forefront of scientific discovery, translational research, and public health practice. The science of nutrition is highly interdisciplinary in nature and spans from genes to the globe. Thus, we will need to enhance interdisciplinary collaborations within our department, between departments, and across schools and institutions. In the next few years, it is important for us to bring in new blood to expand current faculty and further strengthen our department. In addition, environmental sustainability is an emerging area of great interest in nutritional research and policy. Therefore, it is a high priority for us to develop an interdisciplinary research program on the food system, nutrition, and human and planetary health.

Q: There could be some major changes ahead with the new Washington Administration. How might that impact our work here at Harvard Chan, and how should we plan accordingly?

At the moment, it is difficult to predict the impact of the new Administration in Washington on our work, although early signs point toward a less supportive climate for public health research and policies. It is likely that the competition for NIH grants will become even tougher, and thus we need to maintain our competitive edge in attaining federal funds. In the meantime, we need to identify alternative funding sources to fill potential gaps and sustain the department's fiscal health.

Q: You were instrumental in helping to guide public policy by serving on the 2015 Dietary Guidelines Advisory Committee for the USDA/HHS. What was your experience there and what lessons have you learned?

It was a privilege for me to serve on the 2015 Dietary Guidelines Advisory Committee, along with 13 other leading experts. The process was long and very time-consuming, but well worth the time and effort. One of the most important lessons that I have learned is that translating scientific evidence into policies is not straightforward. Besides scientific evidence, we also need leadership, political will, and advocacy. Having said that, I believe that the most important task for us is to build the strongest evidence possible to ensure resulting recommendations and policies are evidence-based and solid.

Q: What do you see as key strengths of the Harvard Chan Nutrition Department?

I'm grateful to the strong support that I have received from our faculty, students, and staff. I'm proud to say that our department has some of the most productive, creative, and respected faculty, whose groundbreaking discoveries have re-shaped public policies and changed the food landscapes in the US and globally. Also, we have been able to attract the best and brightest students and postdocs from all over the world. I'm very fortunate to work with a highly capable and professional administrative team, led by Katrina Soriano. Another strength of our department is the inclusive, supportive, and friendly work environment that has been fostered under Walter's leadership. I think it is critically important to maintain such a culture in our department that promotes good health and psychosocial well-being.

To subscribe to NutriNews, please contact Hilary Farmer, Editor: hfarmer@hsph.harvard.edu.

NEWS FROM AROUND THE DEPARTMENT



Can Diet Prevent Alzheimer's and Cognitive Decline? Dr. Frank Sacks' MIND Study Hopes To Find Out

Dr. Frank Sacks, MD, Professor of Cardiovascular Disease Prevention, and his research team at the Harvard T.H. Chan School of Public Health, have begun a 3-year landmark research study, in collaboration with researchers from Rush University Medical Center, in Chicago, to examine the effects of two weight loss diets on brain health and cognitive decline. "A very big problem in people as they become older, particularly in their 60's, 70's and beyond, is a decline in our thinking ability, or cognitive function. This happens with age, typically. In the MIND study, we're looking at two different ways that we think will improve our health as we get to the older years," says Dr. Sacks. The MIND Study uses lifestyle and behavioral changes to help its participants lose weight and live healthier.

"MIND Diet Intervention and Cognitive Decline" is a randomized Phase 3 trial designed to test whether a healthy diet that the researchers have devised — based on a mix of the Mediterranean and DASH diet plans — can protect people from neurodegenerative illness. Both of these dietary approaches, designed to stop hypertension, have previously been found to positively impact the risk of cardiovascular conditions.

The MIND trial is supported by a \$14.5 million research grant from the National Institutes of Health (NIH), and will follow an estimated 600 people, ages 65 to 84, for three years. It will recruit participants who ideally will be overweight and tend to favor suboptimal diets because these two factors make them more vulnerable to Alzheimer's. The study will be conducted at two different sites: Rush University Medical Center, in Chicago, and Harvard T.H. Chan School of Public Health. Dr. Sacks, who will lead the Boston team, has begun to recruit participants now.

Martha Clare Morris, ScD, a nutritional epidemiologist at Rush University, is the study's principal investigator. Dr. Morris spoke at our Monday Nutrition Seminar on November 7, 2016, and her talk was very well received at that time.

To qualify, individuals must be:

- Overweight or obese and in good physical health (BMI \geq 25)
- Between the ages of 65-84
- Have a family history of Dementia/Alzheimer's Disease
- A poor or suboptimal diet
- A strong commitment to the 3 year intervention

What's Involved?

Office visits and phone calls for dietary and weight loss counseling, and measurements.

If you know anyone who might be interested in participating, please call (617) 998-6333 or email us at mindstudy@hsph.harvard.edu

To learn more visit us on the web at <http://mind-diet-trial.org/>

ANNOUNCEMENTS

The 4th International Conference on Nutrition and Growth (N&G) will take place March 2-4, 2017 in Amsterdam. For more information: <http://2017.nutrition-growth.kenes.com/>

[Healthy Kitchens, Healthy Lives®](#) *Caring for our Patients and Ourselves*, an annual continuing medical education conference started in 2006 and co-sponsored by the Harvard T. H. Chan School of Public Health and The Culinary Institute of America, will be offered on February 9-12, 2017.

During this four-day conference in Napa Valley, CA, faculty members from the Harvard Chan School and other leading experts present the state-of-the-science on diet, nutrition, exercise, mindfulness, and health coaching. These experts are joined by world-class culinary educators to lead interactive, hands-on cooking sessions for healthcare professionals who want to learn what to eat, how to prepare it in a healthy and delicious way, and how to advise their patients, in practical terms, about diet, cooking and other positive lifestyle changes.

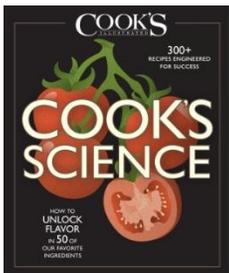
To learn more about the upcoming *Healthy Kitchens, Healthy Lives®* conference, please visit: www.healthykitchens.org

Xiaoran Liu, Postdoctoral Fellow, has been chosen as the recipient of the Scott Grundy Award for Excellence in Metabolism Research, to be presented during the EPI/Lifestyle 2017 Scientific Sessions scheduled for March 7 – 10, 2017 in Portland, Oregon.

Marta Guasch-Ferre, PhD, Research Fellow, is a finalist of the Jeremiah and Rose Stamler Research Award for New Investigators offered by the Council on Epidemiology and Prevention of the American Heart Association. The annual AHA Meeting this year will be in Portland, OR March 7-10, 2017.

Alberto Ascherio's group has been awarded a grant of \$275,000 USD by the ALS Association to investigate the relation between plasma lipids and ALS risk (ALS = amyotrophic lateral sclerosis). (PI: **Alberto Ascherio**)

Kana Wu has been promoted to Principal Research Scientist in the Department of Nutrition, effective January 1, 2017. She was previously a Senior Research Scientist in our Department.



THE SCIENCE GUY!

Guy Crosby, Adjunct Associate Professor, co-authored his second book with the editors of America's Test Kitchen, which was published by America's Test Kitchen in October 2016, titled "**Cook's Science-How to Unlock Flavor in 50 of Our Favorite Ingredients**". A copy is on display with other faculty publications in the cases adjacent to the Kresge cafeteria. Guy will be happy to sign copies purchased by members of the HSPH.

Ann Fisher, Research Assistant at Landmark Center, graduated this last May from Harvard Extension School with a Liberal Arts degree and a minor in Psychology. During her program, Ann received a scholarship to join a neuroscience symposium hosted in Tokyo, as well as participating in a related workshop in Okinawa.



In November, **Professor Donna Spiegelman** gave an invited talk as part of the CUNY School of Public Health Grand Rounds series. Her presentation was titled, "Towards a unified methodology of study design and statistical analysis for causal inference in implementation science."

For the 8th year in a row, **Drs. Chris Duggan** (Professor in the Department of Nutrition), **Anuraj Shankar** and other Harvard Chan faculty (**Drs. Ron Bosch, SV Subramanian, Richard Cash**) attended and taught at the Bangalore Boston Nutrition Collaborative's course in Nutrition Research Methods in Bangalore January 9-20, 2017. Over 30 attendees from India, Nepal, Uganda and other countries in the region learned from HSPH, Tufts and St John's Research Institute faculty on topics including Nutritional Assessment, Epidemiology, Biostatistics, Ethics, Proposal Development, and others. The course has been funded by the Obama-Singh Knowledge Initiative from the US-India Education Foundation.

Dr. Chris Duggan continues our Department's longstanding collaboration with Muhimbili University of Health and Allied Sciences in Dar es Salaam, Tanzania. He and colleagues are soon to embark on two large multi-center trials that evaluate new treatment regimens for children with moderate-severe diarrhea. Over the next few years, more than 4,000 children will be enrolled in these studies, which are funded by the World Health Organization with grants from the Bill and Melinda Gates Foundation. HSPH alumnus Professor Karim Manji (MPH 2003) leads the Dar efforts for these studies.

UPCOMING MONDAY NUTRITION SEMINARS IN FEBRUARY

February 6	Venkat Narayan (NGHP)
February 13	Chris Sempos, Coordinator, Vitamin D Standardization Program (VDSP), Consultant to NIH Office of Dietary Supplements
February 20	President's Day (no seminar)
February 27	Qi Sun, Assistant Professor, Nutrition

NEW FACES IN NUTRITION

The following staff members have recently joined our Department. Be sure to welcome them the next time you see them!



Audra Hite was born and raised in Dorchester, MA with her mother, father, and older brother, Kenneth Jr. She attended the University of Massachusetts-Boston majoring in Exercise and Health Science with a concentration in Health Sciences. Upon graduation, she worked as a ClimbCorps Associate for Brigham and Women's Hospital's cardiovascular health initiative. She spread awareness for heart disease prevention and created exercise programs in the stairwells of Boston's tallest buildings. Audra then transitioned to population science research at Dana-Farber Cancer Institute as a research assistant in the Department of Spirituality and Religion, where she presented on research focusing on the effects of end of life care and clergy race. After her grant funding ended, she went back to school to complete a certification in phlebotomy at Quincy College to gain clinical experience. She worked as a phlebotomist at Uphams Corner Health Center in Dorchester, MA and now works as a Research Assistant II/Phlebotomist in the Department of Nutrition with the MIND team. In her free time, Audra enjoys reading good novels, baking, and traveling.

Kathleen Johnson is Lead Research Dietitian for the Harvard MIND Diet Trial to Prevent Alzheimer's Disease. Previously, Kathleen worked at the University of Hawai'i on a Pacific region-wide USDA/NIFA funded project the Children's Healthy Living Program for Remote Underserved Populations. While in Hawai'i she earned her Master's in Public Health specializing in Social and Behavioral Sciences. She is a Registered Dietitian Nutritionist with a Bachelor of Science in Food and Nutrition from Framingham State College Coordinated Program in Dietetics. Outside of the office Kathleen keeps busy training and adventuring with her dog.





A Connecticut native, **Hannah Konicki** is a graduate of Emmanuel College, where she studied Psychology with a concentration in Health and Counseling. Having internship experience in the Jimmy Fund Clinic at the Dana-Farber Cancer Institute, Hannah has a passion for helping others, especially within the healthcare field. Her undergraduate experience was highlighted with her participation and constant fundraising efforts for Boston Children’s Hospital as well as working at Brigham and Women’s as a Research Assistant. Hannah now joins our department as a Clinical Research Assistant on the MIND trial. She enjoys traveling, spending time outdoors and loves to chat with colleagues over pumpkin spiced lattes (season permitting)!

Jennifer Navaroli is a Case Manager and Registered Dietitian working with the MIND Trial. The MIND Diet Intervention to Prevent Alzheimer’s Disease is a 3-year research study that compares two weight loss diets, and their effects on brain health and cognitive decline. She completed her undergraduate degree at Framingham State University, where she majored in Food and Nutrition. She is currently working on completing a Master of Public Health Degree through UMASS-Amherst. Before starting her role here, she worked for a local WIC (Women, Infants, and Children) Clinic, where she provided nutrition counseling and support for pregnant and breastfeeding women, children, and infants. She is also an active member of the Massachusetts Academy of Nutrition and Dietetics. In her spare time, she likes to try new recipes, read, and play the clarinet.



STUDENT NEWS

April Bowling will graduate in March with an SD in Nutrition, Public Health track. She started as an Assistant Professor at Merrimack College in January.

Dissertation Defenses:

Donghoon Lee, dual degree candidate in Nutrition and Epidemiology—March 28th

Yu-Han Chiu, dual degree candidate in Nutrition and Epidemiology—April 4th

Carolyn Brooks, dual degree candidate in Nutrition and Social Behavioral Sciences—April 6th

Manar Aljazzaf, degree candidate in Nutrition—April 14th



RECIPE CORNER

Roasted Butternut Squash with Cranberries and Toasted Walnuts: The Perfect “Big Salad” for Healthy Winter Eating

By **P.K. Newby**, ScD, MPH, MS (link to pknewby.com)

Ingredients

Salad

- 8 cups butternut squash, cubed
- 1 large onion, large chop (about 2 cups)
- 1 tablespoon rosemary, finely minced
- 1 1/2 tablespoons + 1 teaspoon grapeseed oil, separated
- Salt and freshly ground pepper, to season
- 1 cup walnuts, toasted
- 1 cup dried cranberries
- Chives, for garnish
- 4 cups salad greens (kale, arugula, mustard, spinach, etc.) (*optional*)

Vinaigrette

- 4 tablespoons apple cider vinegar
- 1 tablespoon shallot, finely minced
- 1 tablespoon Dijon mustard
- 1 teaspoon maple syrup
- 1 tablespoon olive oil
- 4 tablespoons walnut oil
- Salt and freshly ground pepper, to taste
- Chives, for garnish (*optional*)

Instructions

1. Preheat oven to 475 degrees F. Toast walnuts in oven while it is heating, about 5 minutes, until deepened in color and fragrant. Meanwhile, cut squash in large cubes and give the onion a large chop. Mince rosemary.
2. Place squash on a large cookie sheet. Drizzle with 1 1/2 tablespoons of grapeseed oil, season with salt and pepper, and toss to coat. Toss together the onions and rosemary with the remaining 1 teaspoon of oil on a separate sheet. Place both in fully heated oven and toss the vegetables on the pan after 15 minutes then continue cooking another 10-20 minutes until soft and browned in spots; the onions will take a shorter time. Remove both from oven and set aside.
3. In small bowl whisk together vinegar, shallot, mustard, maple syrup, and olive oil, then slowly trickle in walnut oil, whisking to thicken. Season with salt and freshly cracked pepper, taste, and adjust ingredients and seasonings as desired.
4. Mix squash together with the onion and rosemary mixture and spoon onto a platter. Scatter with dried cranberries and toasted walnuts. Drizzle with vinaigrette and garnish with chives. Serve on a bed of greens, if desired, and pass additional dressing around the table.

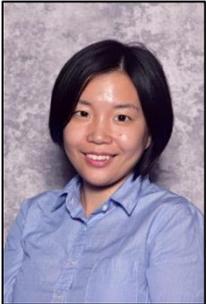
Serve warm or at room temperature. To view a cooking video of a similar recipe, [click here](http://pknewby.com/2014/10/03/autumn-harvest-salad-with-maple-dijon-vinaigrette-video/). (<http://pknewby.com/2014/10/03/autumn-harvest-salad-with-maple-dijon-vinaigrette-video/>)

NEW POSTDOCS AND VISITING SCIENTISTS IN NUTRITION



Shafqat Ahmad is a Postdoctoral Research Fellow in the Department of Nutrition, whose mentor is **Prof Frank B Hu**. During his postdoctoral fellowship, Shafqat is employing multiple approaches regarding different health science disciplines including genetics, genetic epidemiology, statistical genetics and systems biology for a comprehensive understanding of the pathophysiology of cardiometabolic and cardiovascular related diseases. His work also focusses on the contribution of genes in interaction with different lifestyle (including dietary) exposures to these highly prevalent diseases of the current era. For his research, Shafqat is using the epidemiological and genetic resources of the Nurses' Health Study, Health Professionals Follow-up Study, and Women Genome Health Study data.

Klodian Dhana is a Research Fellow, and he was educated in the Netherlands and Albania. Dr. Dhana's research interests are focused on the interplay between environment, genetics and identification of metabolomics-related "fingerprints" in obesity. During his PhD studies, Dr. Dhana investigated the role of obesity and physical activity in cardio-metabolic disorders in older adults within the framework of the Rotterdam Study, in the Netherlands. He has a special interest in developing and applying new methodological approaches to epidemiological research. His mentor is **Prof Qi Sun**.



Xiaoran Liu is a Postdoctoral Research Fellow in **Dr. Frank Hu's** group at the Department of Nutrition. Her research goals are directed toward understanding roles of diet, diet component and life style in regulation and management of obesity and cardiometabolic related disease. Her current work focuses on evaluating the roles of dietary fats in energy balance and development of obesity. For Xiaoran's long-term research goals, she would like to use nutritional epidemiology to bridge evidence gaps in translating research discoveries into clinical practice.

Hazreen Abdul Majid (RD, PhD) is a Visiting Scientist from the University of Malaya, Malaysia. His mentor here is **Prof Walter Willett**. Hazreen's main area of research includes prebiotics usage in intensive care unit patients, probiotics usage among Type 2 Diabetes, and health disparity among low income urban dwellers. He is the principal investigator for the longitudinal adolescent health study in Malaysia. Whilst at Harvard, he will be exploring using microbiome data possibly to develop a new Dietary T2DM microbial risk prediction score.



THE THREE PLEASURES
I'd like to request a healthier dessert, featuring only
fruit, nuts, and dark chocolate.



Be creative and join other chefs in the dessert by
design challenge! Details at hsph.me/3fordessert

 **HARVARD**
T.H. CHAN | **SCHOOL OF PUBLIC HEALTH**
Department of Nutrition

 **@HSPHnutrition**
#3ForDessert

WALTER WILLETT DESIGNS NEW HEALTHY DESSERT OPTION!

If, like many of us, you are one of those people who tend to feel guilty when you go to a party or restaurant and want to indulge in a nice, decadent dessert, then you can now look forward to more guilt-free days ahead!

Dr. Walter Willett suggests you ask your host or server if you can design your own dessert by asking them to prepare a dessert for you that uses a combination of his "Three Pleasures":

1. **Fruit** – Dried fruits will also work.
2. **Nuts** – Nuts are a great source of healthy fat and protein.
3. **Dark chocolate** – Dark chocolate offers a wide range of complex and delightful flavors. Remember that the higher the cocoa percentage, the less sweet it will be. 70% or higher is a nice complement to the sweetness of the fruit!

*An optional fourth "pleasure" can also be a touch of spirit, such as port wine.

One suggestion is to put these ingredients in a sort of fruit bowl, then sprinkle with nuts and add a few squares of dark chocolate. However, any creative presentation will be delightful, both to the eye and to the palate.

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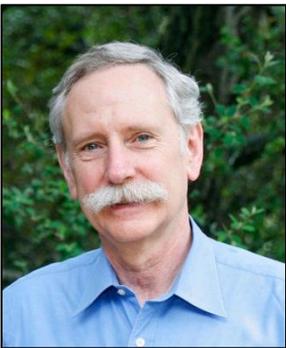
<https://www.hsph.harvard.edu/nutritionsource/2016/07/11/dessert-by-design-three-pleasures/>

For more healthy eating ideas, please go on to our Nutrition Source website: <https://www.hsph.harvard.edu/nutritionsource/>. Questions about Nutrition Source? Please direct them to Brett Otis: otis@hsph.harvard.edu

For further information about Dr Willett's 3 Pleasures, be sure to read his two recent articles in National Geographic and FSR Magazine:

- ["Rethinking Dessert," National Geographic's The Plate](#)
- ["These 3 Pleasures Make Desserts Healthy and Enjoyable," \(guest article by Dr. Walter Willett\), FSR Magazine](#)

WALTER WILLETT REFLECTS ON HIS 25 YEARS AS NUTRITION CHAIR



Dr Walter Willett leaves a strong legacy behind him. Under his exemplary leadership, he has led this Department to its current position as Number 1 in the country. The number of his contributions, not only to the Department of Nutrition, but also to the Chan School as a whole, is enormous. Professor Willett is a world-renowned researcher with over 1,700 papers on nutrition and lifestyle, as well as the related risks to cancer and other chronic diseases. He is also a member of the National Academy of Medicine and the recipient of numerous awards. In his 25 years as Chair of the Department of Nutrition, he has developed the field of nutritional epidemiology, and the work of the department has made a major impact on nutritional policies and recommendations worldwide.

Q: *Dr. Willett, you have made enormous strides in your leadership of the Nutrition Department, and you are now almost a household word. What do you feel are your greatest accomplishments as Chair?*

Probably my most important accomplishment has been to bring together a stellar group of investigators, post docs, and students. Without this, nothing I have been able to accomplish would have been possible. Together, we have been able to show that it is possible to study the long-term consequences of diet, and that aspects of diet affect almost every health outcome that we examine. Also, knowing that I can turn over leadership to **Frank Hu** gives me great confidence that our department will continue to grow even stronger in the years to come.

Q: Like all good researchers, your work has changed and grown in different directions over the years. What do you think have been the biggest changes in the field of nutrition in the last 25 years?

Twenty-five years ago, nutritional epidemiology was not part of mainstream nutrition, and dietary guidelines were being made by people who had little understanding of how to study diet and health. Today that has changed, and data from nutritional epidemiology are at the core of nutrition research and dietary guidelines.

Q: How has the work of you and your colleagues impacted some of these changes?

Probably most important are our methodological studies; for example, the validation studies of dietary assessment methods, the need for energy adjustment, and the role of substitution analyses. With this, we have overturned the focus on fat reduction, and have documented the importance of type of fat, type of carbohydrate, and overall dietary quality, among many other findings.

Q: What do you see as oncoming challenges, not only to nutritional epidemiology, but to the role of public health in general? How would you suggest we meet them?

We still have much to learn about more detailed aspects of diet and health. However, now that we understand much better the nature of healthy diets, translation of this into policy and daily lives is a huge challenge because the gap between an optimal diet and reality is huge. We also now need to view everything we do through the lens of climate change and environmental impacts; if we don't address this, little else will matter.

Q: Which of your many accomplishments are you most proud of?

Beyond what I have mentioned already, probably the most important specific accomplishment has been the identification of trans fat as major source of morbidity and mortality. This was off the radar screen of the nutrition community, and the role of trans fat was initially denied by most of our colleagues, the heart disease community, and industry. However, we have now almost entirely eliminated trans fat and we are already seeing the benefits.

Q: What have been your biggest challenges over the years?

The central challenge has been the idea that it is impossible to measure or study diet. The biggest obstacles were often in the nutrition community.

Q: Now that you are no longer the chair of the Department of Nutrition, what plans lie ahead for you?

I hope to have more time to engage in our research, work with our students, and devote attention to the issue of food supply and climate change.

Q: Will you be moving in new research directions in your new role?

I don't plan any major new directions. Certainly the integration of diet with new technologies such as metabolomics, and the microbiome is very important, but I expect the next generations to lead these efforts. Diet must be central to this research as it is a primary determinant of what these technologies measure. I do plan to continue to work at the extremes of the life cycle, understanding the effects of adolescent diet and the role of diet in cognitive decline. As noted earlier, I hope to contribute to work on ways to address climate change by improvements in our food supply.

Q: Which issues do you think need the most emphasis now?

Translation of what we already know into practice deserves major emphasis, and we must do this in ways that are environmentally sustainable.