

NUTRI NEWS

Department of Nutrition, Harvard School of Public Health

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An Overview of NHS II

The Nurses' Health Study II (NHSII) was established by *Walter Willett, MD, DrPH* and his colleagues in 1989. Funded by the National Institutes of Health, this cohort was intended to study a younger population (25-42 yrs old) of nurses than that of its predecessor, the original Nurses' Health Study (NHS), which had begun in 1976. Initially, the NHSII cohort's primary aims were to investigate the relationship between oral contraceptive use and diet and lifestyle characteristics and breast cancer risk in younger nurses. Interestingly, a number of study participants were daughters or nieces of NHSI participants. The NHSII has 116,430 participants, almost 90% of whom have continued to participate since its inception.

What do NHSII participants actually do, you might ask? At the beginning of the study, each participant first completed a baseline questionnaire, after which she then received follow-up questionnaires every two years. These follow-up questionnaires contain questions about disease and other health-related factors such as smoking, hormone use, pregnancy history, and menopausal status. Since 1991 Food Frequency Questionnaires (FFQs) have also been administered at 4-year intervals. In addition, there is an NHSII biorepository which includes plasma, red blood cells, white blood cells, and first-morning urine samples from 29,611 women. In the case of two thirds of these women, NHSII has timed follicular and luteal premenopausal samples. These women were then asked again to provide samples, and 16,000 provided a 2nd blood/urine sample in 2008-2011 when most of the participants were postmenopausal. The biorepository has buccal cell (cheek) DNA from an additional 29,859 women; thus, in total the biorepository contains DNA on almost 60,000

participants as well as archival tissue blocks for incident breast and ovarian cancers and benign breast disease. Tissue microarrays have also been created from many of these samples and are already being used extensively by investigators worldwide. In addition, the NHSII is currently collecting melanoma and other tissues, and prediagnostic mammograms have been collected for breast cancer cases and controls (women without cancer).

A lot of people in the Department are involved in the NHSII cohort, including researchers, students, biostatisticians, laboratory personnel, dieticians, research assistants and computer programmers. Some have been actively engaged in NHSII right from the start. One of them is NHSII Project Manager, *Elizabeth Lenart, PhD*.

Meet Liz on Page 4!

For information on all of the NHS studies, go to <http://www.channing.harvard.edu/nhs/>

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MEET GUY CROSBY:
A NUTRITION DEPARTMENT ADJUNCT PROFESSOR
by Hilary Farmer

A major ingredient in the Nutrition Department's teaching effectiveness is its adjunct faculty. Since many adjunct professors are rarely at HSPH except when in the classroom, you may not know a lot of them. However, here's a face many of you may instantly recognize, even if you are not quite sure where you saw him before. Let's meet *Guy Crosby, PhD, Adjunct Associate Professor of Nutrition*—and local television celebrity!

Dr. Crosby has very creatively combined a lifelong love of science with a strong enthusiasm for cooking during a 44-year career which has spanned some rather unique avenues of exploration. He is indeed a true food science Renaissance Man! Like many other kids during that era, Dr. Crosby spent his high school years playing junior scientist in a laboratory that his father built for him in their basement, and this is where he began to investigate the chemistry of food. In fact, one of his first experiments was to prepare bromoacetone, which turns out to be a potent lachrymator, or tear-producing compound. Not a good idea, he discovered! He continued this scientific interest throughout college, and earned a PhD in organic chemistry at Brown University, focusing his dissertation research on cholesterol. After Brown, Dr. Crosby was a postdoctoral research fellow at Stanford University, where he and his wife Christine and other like-minded friends all developed a keen interest in food, wine and cooking.

Recognizing his talents, Alza Corporation, a pharmaceutical start-up company that had created a new venture developing novel food ingredients, made Dr. Crosby an offer he couldn't refuse. Thus, Dr. Crosby embarked

on a highly productive 30-year industrial career in food ingredients, which included a position at FMC Corporation in Princeton, NJ as research director in agricultural production and food ingredients, and later a position as Vice President of Research & Development at Opta Food Ingredients, Inc. back in Massachusetts which is where Dr. Crosby grew up. After this, Dr. Crosby took his first retirement in 2002.



Retirement, however, did not suit Dr. Crosby for long, and soon afterwards he embarked on a new career in teaching. In fact, Dr. Crosby's teaching career began right here in our own Nutrition Department! When I asked Dr. Crosby what brought him here to HSPH, he told me that he had bumped into *Walter Willett, MD, DrPH*, Department Chair, at a conference on the Mediterranean Diet organized by Oldways, a food and nutrition nonprofit organization based in Boston. After engaging Dr. Willett in a memorable conversation about the scientific merits of this diet, Dr. Willett responded by suggesting that Dr. Crosby teach a proposed new food science course in his Department, *NUT 209: Food Science and Technology*. Dr. Crosby agreed, and developed this new course, which he has co-taught with *Clifford Lo, MD, ScD, Secondary Associate Professor*, ever since 2003. This popular course is now an HSPH

requirement, which is offered every 2 years. Dr. Crosby has now taught over 100 students here. In addition to *NUT209*, Dr. Crosby became a full-time tenured associate professor in the Department of Chemistry and Food Science (the only combined department of its kind in Massachusetts) at Framingham State University until his retirement there in 2011.

However, once again Dr. Crosby couldn't manage to stay retired for long, so his next venture into food science took him into show biz! In 2004, Dr. Crosby lent his considerable scientific expertise to *Cook's Illustrated Magazine* which takes a more scientific approach to recipe development, and he became its Science Editor in 2005. Soon afterwards, Dr. Crosby recorded segments for *America's Test Kitchen* with its founder, Christopher Kimball, and now also provides the scientific commentary for their new radio program on NPR. Last fall he also appeared in a NOVA scienceNOW PBS television program called "Can I Eat That?" about the science of cooking a Thanksgiving dinner.



A segment from ATK on PBS. On the left is Chris Kimball helping with a food chemistry demo by Dr. Crosby.

Considerably impressed with all of this, I then asked Dr. Crosby what it is like to perform in a TV show like ATK? I was quite surprised to learn that all of the cooking shows for an entire season are shot during a short, 3-week period in May. And all of Dr. Crosby's appearances in the shows are shot in a single afternoon (which explains why he's always wearing the same outfit)! Although he meets many times before this single shoot with Chris Kimball and producer Melissa Baldino to go over all the key points, Chris doesn't necessarily follow the script and might throw an entirely different question at Dr. Crosby than the planned one. Fortunately, Dr. Crosby is quick on the uptake and doesn't mind winging it. It's important, he emphasizes, to keep his answers brief but concise, and simple and short—and all of this is where his past teaching experience has really come in handy.

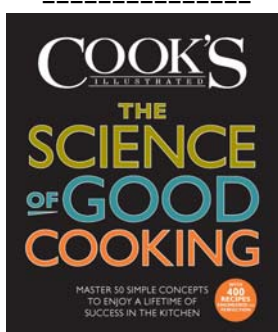
When I asked Dr. Crosby if he, himself, liked to cook, I learned that he not only loves it but considers it among the basic repertoire of things he does best. Although his wife did all the cooking while Dr. Crosby was working in the food industry, he does 90% of it now. The two Crosbys take an entirely different approach to how it's done, though, as Guy works in the kitchen as though he were working in a lab—he considers a recipe to be somewhat like an experiment and one that is meant to be tinkered with. Christine, on the other hand, does all of the baking and tends to use very precise measurements when she cooks. My next logical question was what were Guy's favorite recipes, and discovered that linguini with clam sauce was a favorite (and that it's essential to use whole clams and vermouth), followed by coq au vin and garlic shrimp.

Curious to know what other endeavors adjunct professors might engage themselves in, I quickly learned that Dr. Crosby has had regular speaking engagements, such as at the Boston Museum of Science and The National Museum of American History (home of Julia Child's kitchen) to promote his new book "The Science of Good Cooking" and at the Culinary Institute of America in Napa last January, among others. On top of all of this, Dr. Crosby is the inventor of 17 US patents, twelve of which are on synthetic sweeteners!

Finally, I asked Dr. Crosby if he had any future plans cooking on his back burner, and he mentioned that he will be giving a lecture on cooking science at MIT in late March, and a talk at the American Chemical Society meeting in New Orleans on "Building a Small Business Based on Food, Chemistry, and Communication." In April he will also appear in an ACS webcast on molecular gastronomy, and be on more promotional tours for his new book. Next fall he will again teach *NUT 209* with Professor Lo. In April Dr. Crosby will also be officially included in the first group of Certified Food Scientists (CFS) approved by the Institute of Food Technologists.

If you would like more information on Dr. Crosby or his future speaking events, please see his website:

www.cookingscienceguy.com.



MEET LONG-TIME NHSII STAFFER, ELIZABETH LENART!

Although the main hub of activity for NHSII has always been at the Channing Laboratory, currently under the scientific direction of *A. Heather Eliassen, ScD*, and at the Landmark Center, the Nutrition Department also boasts its own little beehive of activity under the overall guidance of *Walter Willett, PI* of NHSII, and *Liz Lenart*, its Project Manager. In fact, it is Liz who might actually be considered the "face of NHSII." It is she who gathers information and prepares for all of the biweekly meetings. It's also Liz who assists with keeping tabs on the literature associated with NHSII and its ancillary grants and subcontracts, and helps prepare various grant applications and progress reports. Liz also acts as our go-between with the NIH Program Officer and various budget people connected with these grants. In short, Liz has broad overall responsibilities for NHSII and serves in a variety of capacities. And Liz is quite pleased with the fact that NHSII received a superscore on its last grant proposal; she and Dr. Willett remain confident that it will receive funding, although the total dollar amount still remains uncertain.

Not surprisingly, NHSII keeps Liz very busy, although she still manages to be involved with other grants as well. Most of these are smaller, related grants that tie in to the research that is undertaken by the larger cohorts. These smaller grants may fill in certain shortfalls by funding some analyses that the larger, federal grants don't cover. For example, breast cancer studies, pilot projects, NHSIII, GUTS (the sons and daughters of NHSII participants), and pooling studies are funded by the smaller grants.

One such funding source has been the Breast Cancer Research Foundation, which Liz

emphasizes is an absolutely wonderful organization! Liz might also be considered as sort of a “shepherd” because she coordinates and keeps tabs on such a variety of different projects and their Specific Aims. She also edits and synthesizes the work performed by various researchers for reports to funders. By coordinating all these different pieces, Liz has thus learned how to very successfully “package the product”.

When I asked Liz what her background is, I learned that she earned her PhD in nutrition at Tufts University. Her doctoral dissertation compared female members of sports teams with females who were not on sports teams, utilizing FFQs for her comparison. After graduation, she responded to an ad for a part-time job in our Nutrition Department. She was then interviewed by *Walter Willett* and *Eric Rimm*, who hired her for the position—and once she came here, she never left! In fact, Liz has been with us for 19 years now. Like most jobs, hers has evolved over time. Originally hired to work on a variety of projects, she later began assisting with the day-to-day operations of NHSII. Liz has also been involved with the Health Professionals Follow-up Study and has facilitated and assisted in the editorial process of the 2nd and 3rd editions of *Walter Willett’s* textbook, *Nutritional Epidemiology*. When asked what she likes most about her job, Liz replied that she loves it for its novelty—even now she finds that she is still learning new things all the time. And, of

course, she gets to work in an academic environment where such great science is taking place!

When asked whether and how NHSII differs from the other large cohorts, Liz informed me that it’s a greater challenge to follow up with the participants because they are in the busiest time of their lives right now. Although many participants are super-responders to the questionnaires, many others are slower to respond and require continual reminders.

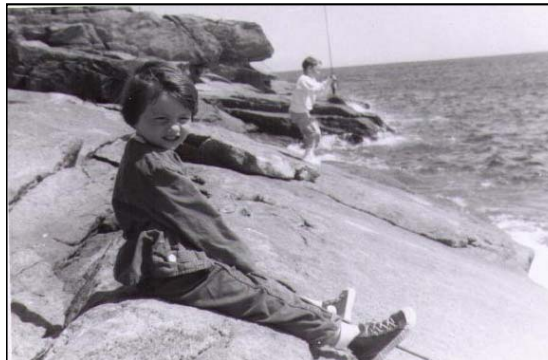
Luckily, most complete their questionnaires online now. In fact, the next questionnaire, currently in its development phase, is slated to be mailed out this June.

What does Liz like to do in her spare time, I wondered? I learned that she loves to snow shoe and runs. Jamaica Pond is her favorite running spot because it is so peaceful and scenic. Lunch time is a great time to run, and if any of you would like to join Liz on one of her runs, she says she would love the company! In fact, she even sighted a very rare golden

eagle on one of these runs a few years ago. At home Liz enjoys cooking soups and making salads. Her whatever-is-in-the-fridge soups are so full of good things and flavors, she explains, that even her son Noah will eat them! Liz is also an evangelist for using the pressure cooker, because you can whip up a tasty bean dish in just under 12 minutes!



As you see, Liz has always been an outdoor kind of gal.



THE CULTURAL IMPORTANCE OF FOOD: AN INTERVIEW WITH SHERRY YAUN

by Sherry Yaun and Hilary Farmer

Most people in the Nutrition Department are here because they are interested in learning about the biochemical nature of metabolism and food and the different ways in which diet may impact public health. However, food is important to us in other ways: It plays a central role in many of our social activities, we love to dine out at our favorite restaurant, or we may just want to experience an exciting new recipe at home. Even more importantly, certain foods carry strong cultural meanings for many people. For example, eggs, sticky rice, noodles, fish and cakes have important meanings for certain Chinese peoples. Because China has such a large population consisting of so many different cultural and ethnic groups, the same meaning for a given food may not exist for everyone across the various Chinese communities. However, I was curious to find out what these 5 foods might mean to someone I actually know. So I began to have several discussions with **Sherry Yaun**, *Biostatistician*, and originally from Taiwan, to learn what eggs, sticky rice, noodles, fish and cakes mean to her.



First, I learned that eggs and sticky rice play a central role in the birth of a new baby. In many Chinese cultures, eggs symbolize fertility while sticky rice stands for wealth, abundance and good luck. Both are important for the future success of the newborn. The first month after birth is considered to be critical to the infant's survival, so the baby's mother is accorded special treatment and given a special diet, maternity leave, and plenty of rest. Once the baby survives this crucial 1-month period, its paternal grandparents throw a large banquet to formally announce its birth. It is customary for the parents to give their guests at this banquet a gift of eggs and sticky rice. Mushrooms, which can symbolize a long life, happiness, re-birth, and female fertility, are often included as well. The eggs are especially considered to be good luck, and are quite often dyed red (a very auspicious color) and usually given in pairs or multiples of 2 because even numbers are deemed lucky and most (though not all, like the number 9, for instance, because its pinyin name "jiu" sounds the same as the word for "longlasting") odd numbers are considered to be unlucky. Historically, giving eggs may pre-date to earlier times of famine when eggs were very scarce and a precious



commodity to poor people. Thus, the practice of giving a basket of eggs, sticky rice and mushrooms was traditional in the countryside (especially if the baby was a boy), and symbolized the hope that the baby would grow up to be very well-fed and healthy. It is also customary for the guests to bring presents for the new baby, and typical gifts might include silver, gold, jade, rings, bracelets, necklaces, and small envelopes of money.

Another important food that is rich in meaning is the noodle. In many Chinese cultures noodles are synonymous with longevity—so the longer the noodle, the better! Therefore, if a person wishes to enjoy a long life, s/he must be careful not to break a noodle, because if one does, one will be cutting short a long life. This principle also applies while actually cooking noodles so, needless to say, preparing a noodle dish properly is extremely difficult for most cooks. A dish with noodles and 2 eggs is considered to mean good luck.

Perhaps the most important food of all is fish, which is a very special dish during the Chinese New Year. When I asked Sherry why this is so, she told me that the Mandarin word for fish was *yu*. Because homophones are important in the Chinese language and culture, I was informed that *yu* also translates to abundance, richness, surplus, wealth and peace. Thus, people eat fish during the New Year so they will have more than enough of everything in the coming year. The head of the fish will usually point to the honored guest at a banquet. A whole fish symbolizes good luck, and must be eaten intact so as not to cut off one's prospects for enjoying wealth and abundance. Understandably, the ability to cook a fish completely intact is a highly advanced culinary skill and one that is difficult to acquire. In fact, new cooks in Chinese restaurants are often tested by their skill in cooking a fish. Fish in restaurants is generally prepared by steaming; however, it can also be fried or cooked whole in a soup.

Fish are often depicted in pairs to symbolize good luck. They are also a popular decorative motif in many Chinese households. *Yu* is used in many graphic designs. Businessmen may display fish signs to thank customers for coming to their establishment, and many of them have fish tanks in their homes as a token of their prosperity. In fact, Sherry herself has 3 different fish tanks at home: one for goldfish, one for tropical fish, and a third for saltwater fish. She says her family enjoys these immensely because the swimming fish are so peaceful and relaxing to watch. I learned that in China, however, goldfish are kept in a large basin, and not an aquarium like here in the US.

Finally, Sherry and I discussed the importance of cakes in Chinese culture. Most of our discussion focused on a soft mini-cake made from sticky rice that is greatly enjoyed by people in Taiwan. These cakes are made from a special rice flour and may be cut into pieces and fried, or steamed the traditional way in a bamboo basket. Rice cakes can be served either cold or hot, as a dessert. Other ingredients, such as green tea, brown sugar, walnuts or dates are often added. Although cakes are an everyday food item in China, special cakes are made during the New Year because of their sweetness, which symbolizes a rich and sweet life ahead. Fancy cakes may be given as gifts. At the end of the Chinese New Year, sticky rice cakes are served in soups. These soups (*tan*) may be large or small, sweet or not, and some contain meat.



One thing that I learned from my discussions with Sherry was how interconnected and polysemous so many aspects of Chinese culture are and how much certain foods are steeped in symbolism. For example, homophones are quite significant and I learned that *tanyuan* means “cake”, and *yuan* means “round and perfect”. Tanyuan brings the whole family together to eat and pray for good fortune in the coming year, usually on the 15th day of the lunar New Year. The Mandarin word for “sticky” sounds like *year* and the word for “cake” sounds like *high*. Thus, eating a sticky cake would symbolize the act of raising oneself higher in the new year ahead!



[Editors' Note: If you enjoyed this article and would like to see more like this in the future, please be sure to let us know. Also, if you would like to share certain aspects of food in your own culture with the Department in future issues, your contributions will be greatly welcome!]

MEET FOUR NUTRITION STUDENTS!

The Nutrition Department is very fortunate to have a highly talented and diverse group of students. They come from different countries and have, in some cases, widely different backgrounds—but one thing they all bring to their studies is a desire to advance the public's health through learning, research, and communication. These students are our next generation of global health leaders.

NutriNews will be profiling more of our students in future issues, but let's meet four of them now!

Jennifer Falbe

Jennifer came to our Department in 2008 because she was impressed with the quality and impact of the Nutrition Department's research. For instance, she didn't think that regulation of trans fats in the food supply would have been possible had it not been for the Department's research serving as an important part of the scientific justification for policy change. Jennifer was also drawn to our efforts to disseminate our research through the *Nutrition Source* website.

Jennifer's primary advisor is *Walter Willett, MD, DrPH*, and she also works closely with *Alison Field, ScD* and *Kirsten Davison, PhD*.



With them her research has focused on the causes of childhood obesity and different ways to address and prevent it. For her dissertation, Jennifer has examined how new and traditional forms of screen-based media (e.g., broadcast TV, electronic games, DVD/videos) relate

to unhealthy weight gain and consumption of foods commonly advertised among children and adolescents participating in the Growing Up Today Study II. Her dissertation topic was motivated by the fact that unlike TV, there is a

paucity of research on computer and video game use and obesity, and virtually no data exist on the consequences of media exposure through newer devices and platforms. For example, recent advances in digital technology have exposed children to a new arsenal of food marketing through social networking, product placement in video and electronic games, and interactive ads on websites like Hulu. TV is hypothesized to affect weight gain by exposing viewers to unhealthy food and beverage marketing, thereby inducing overeating. Now it has become clear that these other forms of screen time also expose children to advertising for unhealthy products.

Through Jennifer's research, she has found that TV is not the only form of screen time to be concerned about, and that other forms of screen-based media are also related to adiposity and/or diet quality.

In addition to her dissertation work, Jennifer has played a major role in planning and evaluating the Childhood Obesity Research Demonstration Project—a CDC-funded multi-sectoral community intervention that focused on addressing childhood obesity in low-income communities. For this study, she has developed evaluation measures and managed data collection across several sectors, including schools and child care centers.

When asked how this might fit in with her future plans, Jennifer replied that she would like to continue to studying ways to prevent obesity and improve diet quality, particularly among children. Screen time is one important aspect of children's environments that should be addressed, and she would like to expand her research to study other environmental and

policy determinants of diet quality and adiposity. After her graduation this spring, the next step for Jennifer will be a postdoctoral position because her long-term goal is to pursue a faculty position that includes research and teaching.

In addition to her studies, Jennifer loves to play basketball; in fact, she played competitively and coached a middle school team. She currently has begun to take up road cycling, but feels that she is not yet ready for the Departmental ride to the Cape. Like most people in this Department, Jennifer also enjoys teaching, cooking, traveling, and trying new restaurants. Her favorite food is Vietnamese and anything spicy.

Jennifer was recently awarded the Berkowitz Fellowship in Public Health Nutrition and Simonian Research Excellence in Nutrition Award.

Audrey Gaskins

Audrey came to HSPH in the fall of 2010 to begin her studies in the Nutritional Epidemiology doctoral program. Upon her graduation from college, she worked at the NICHD for two years as a post-baccalaureate fellow doing research on diet in relation to ovulation and reproductive hormones. During her time there Audrey developed a passion for nutritional research, which motivated her to apply to doctoral programs in nutrition and epidemiology. She discovered that Harvard was clearly the best fit!

Audrey's advisor is *Jorge Chavarro, MD*, and although few people can rival Audrey's own passion for diet and fertility, Dr. Chavarro is certainly one of them! Under Dr. Chavarro, Audrey's research at Harvard has focused on nutritional and other lifestyle determinants of male and female fertility. Her first two thesis papers have been on maternal and paternal folate intake in relation to outcomes of assisted reproductive technologies. Although high

maternal folate consumption is already known to prevent neural tube defects, there is increasing evidence that folate could also have positive effects on other reproductive endpoints such as live birth rates. Similarly, a few small studies have shown a beneficial effect of paternal folate on semen quality parameters, but no study has yet to look at the more clinically relevant outcome of live birth. Audrey's last two papers examined maternal folate and dietary patterns in relation to spontaneous abortion in natural pregnancies. Audrey explains that despite the fact that spontaneous abortions are relatively common (~20% of recognized pregnancies), there have been surprisingly few studies on diet. Together these papers will be the first prospective studies of diet in relation to spontaneous abortion risk.



Audrey hopes that her work here at Harvard will allow her to continue to do research in the area of nutrition and reproductive health. Specifically, she would like to work towards incorporating more male exposures into studies of fertility and time to pregnancy. Fertility issues are not only female problems dictated by maternal exposures, and Audrey feels that it is time more studies started acknowledging this. Men are important, too! Audrey's long-term goals include a desire to remain in academia because she likes the idea of teaching and mentoring students—and, of course, continuing to do research in the areas of nutrition and reproductive epidemiology.

Originally from the South, Audrey sometimes feels like it is a foreign country because living in frigid Boston has been quite a transition for her! Audrey has definitely learned how to layer and

bundle. When she comes back to Boston from North Carolina, Audrey always brings grits back with her in her suitcase.

In addition to her studies, Audrey loves skiing, tennis, yoga, running, traveling (she has visited over 25 countries and almost all the US states), hanging out with her family (she is one of seven children) and friends, cooking (& eating), reading (with a well-used Kindle), and Duke basketball games. Unfortunately, her studies don't allow her much time for these activities right now. People are always surprised when they learn that Audrey was originally trained as a mechanical engineer. In fact, she can fix many appliances and knows her way around any tool shop (and finds that these skills come in handy)! Audrey's favorite food is chocolate (the darker the better) and peanut butter (together or separate), and she admits that they are actually more of an addiction.

Andrew Thorne-Lyman

Andrew first came to HSPH in 2008. After receiving his master's degree in international health from Johns Hopkins University, Andrew worked as a nutritionist for Helen Keller International and the United Nations for 10 years. He was drawn to the nutritional epidemiology program because he wanted to learn how to use the best methods available to analyze dietary and nutritional data and felt that it was best to learn directly from the very people who had invented many of the methods.

Andrew's advisor is *Wafaie Fawzi, MD, DrPH*, and under his supervision Andrew has been exploring the relationship between vitamin D during pregnancy and birth and neonatal outcomes. Based on a systematic review that the two of them had done which suggested that vitamin D had promising potential in relationship to birth outcomes, they developed plans to conduct an observational study of vitamin D levels among pregnant women in Tanzania, and risk of adverse outcomes

including intrauterine growth restriction, preterm delivery, and infant mortality. Andrew has also been working a great deal with *Sjurdur Olsen, MD, PhD*, an adjunct faculty member affiliated with the Nutrition Department who helped to develop the Danish National Birth Cohort, a cohort composed of nearly 100,000 women. His thesis includes two papers exploring vitamin D intake during pregnancy and risk preterm delivery and preeclampsia in this cohort.

Andrew was originally motivated to study this topic because of his own experience of having supported his wife through a very difficult pregnancy and delivery in which their twins were born preterm and his wife had experienced preeclampsia and other birth complications. Fortunately, his wife and children are healthy now, but this experience made Andrew



want to study an exposure that he felt had great potential to prevent women from going through a similar experience. Despite being fairly uncommon, preeclampsia is one of the main causes of maternal mortality globally, and preterm delivery is a factor in most neonatal deaths. Andrew's own personal experiences facing many of the same health outcomes that he is currently studying have been a great motivator to try to use the best methods he can to answer the questions that he is exploring. Even when Andrew's data lead to null results, he still hopes that he is helping to move the field forward towards interventions that may become more promising in the future.

When Andrew graduates, he would like to continue working in the field of maternal and

child nutrition, and feels that his training here has given him the knowledge and confidence to use the statistical and epidemiological methods that he has learned here to answer many of the questions that still need to be addressed. He will do this by joining the Earth Institute at Columbia University where he will be working with the team implementing the Millennium Villages Project to test different interventions for reducing childhood undernutrition. Andrew has long felt that the links between maternal and child nutritional status have been downplayed and he is eager to remain involved in studying those linkages. In the long term Andrew would like to work at the intersection of academia and public nutrition programs, using the best methods possible to generate evidence that will help policymakers make sound decisions.

Andrew also ran in the Boston Marathon in 1997, but never thought at the time that he would end up moving here! In addition to running Andrew speaks Nepali, which he learned as a study-abroad student in Nepal. Fatherhood also keeps Andrew very busy. His kids were 1 year old when he started our program here and they are now in kindergarten. The kids help Andrew grow heirloom vegetables in their garden at home and are quite expert tomato pickers. Finally, Andrew couldn't come up with a favorite food, but wondered if coffee counts?

Ran Zhang

Ran Zhang first came to HSPH in September 2008, because he felt that our Nutrition Department has the most renowned faculty members in the field, the greatest resources and opportunities, and offers the best doctoral training anywhere. In addition, the amazing financial aid has allowed him to completely concentrate on his studies and research. Ran particularly appreciates the friendly atmosphere in our Department, where he can see people smiling at each other in the hallway or having a jovial conversation around the water cooler.

Ran's advisor is *Edward Giovannucci, MD, ScD*, and Ran has been working with him on a project that examines the association between rice consumption and overall cancer risk. Ran was motivated to begin this project when he read a recent article in *Consumer Reports*, which found a worrisome arsenic level in US rice products. Although arsenic is generally considered to be a carcinogen, no previous studies have specifically evaluated long-term rice consumption and associated arsenic exposure in relation to cancer risk. Ran and Dr. Giovannucci used the data from our Department's three large cohorts, the NHS, NHS II and HPFS, and the results suggested no increased cancer risk even among people who consumed rice consumption on a regular basis. Naturally, Ran felt happy and relieved about the findings, not only because they can address a public concern, but also because Ran himself is from China and eats rice every day.



Ran is also working on a project to investigate the risk factors for chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) among men. Over 90% of men with prostatitis presenting with pelvic pain demonstrate no evidence of urinary tract infection and are therefore classified as CP/CPPS. Albeit it is a prevalent urological disorder, the etiology of this nonspecific inflammation within prostate still remains unknown and currently no established

targeted treatment exists. Therefore Ran will assess the effects of lifestyle and dietary factors on the development of CP/CPPS in the HPFS, and hopefully, the findings will enable us to better understand its pathology and improve its prevention and control.

When asked about his future plans, Ran informed me that his ultimate goal is to become a physician scientist. While epidemiology focuses on primary prevention, clinical work places greater emphasis on secondary and tertiary prevention. Ran believes that the combination of the three components would be the strongest strategy to reduce the burden of illness and suffering at both the individual and population levels. Once he finishes his doctoral training at HSPH, Ran will begin his residency training as part of his medical postgraduate education. Here in the Nutrition Department and HSPH, Ran has seen many faculty members who are both clinicians and researchers and considers them to be his role models. Ran would like to not only be a practitioner using clinical medicine, but also a researcher who helps the science of medicine progress.

When asked how he liked living in Boston, Ran replied that Boston is one of his favorite cities, and that he likes Boston even more than his hometown, Beijing. Some of the things he enjoys most about living here are the Spring Festival parade in Chinatown, free vitamin D at the beach in summer, colorful foliage during fall, and shoveling snow throughout winter! Basketball and football are Ran's favorite sports, and he is understandably a huge fan of the Celtics and Patriots now. When Ran was admitted to his DSc program here, he secretly wished that the Celtics would get another championship during his doctoral training. However, time flies and it appears that Ran's wish will not come true in the near future. Ran also loves

travelling and adventuring in the wild, and enjoys seeing the beauty of nature. He has recently camped in a couple of our national parks including Acadia, Yosemite and Denali, and eagerly awaits making more trips like these for his further exploration. When asked the inevitable question as to what his favorite food was, I learned that Ran's favorite dish is salmon sashimi. When he dines in a Minado sushi buffet, he likes to "prove that [he] can overeat fish by impressively much"! Finally, I remarked upon his name, and learned that *Ran* in Chinese is the word for sunrise, and that his mom gave him that name because he was born at 6 o'clock in the morning. Thanks to the coincident existence of the same-spelling-different-meaning English word, Ran says that it is much easier for us to pronounce his name correctly.

***Help Our Graduates Celebrate
on Thursday, May 30, 2013***

**Save the Date for
HSPH Commencement**

Information at:

www.hsph.harvard.edu/commencement/



REVISIONS TO THE DEPARTMENT'S PHN CONCENTRATION!

Revisions to the Public Health Nutrition (PHN) concentration were formally approved recently and are detailed below. Students may also wish to note that *Dr. Kirsten Davison, Director, Graduate Program in Public Health Nutrition*, will be teaching a new PHN course this spring: *ID 238: Programs and Principles of Public Health Nutrition*. This course will be taught in the Spring 2 semester, and will be held on Thursdays from 9:30-12:30. There is still time to sign up for this course!

Summary of Revisions to the PHN Program

Course Requirements:

We have revised the general nutrition courses students are required to take, and have added 25.0 credits of concentration-specific courses, including 12.5 credits in social and behavioral health. The academic program in Public Health Nutrition centers around five core skill areas:

- Nutrition science and principles;
- Translation of science into practice;
- Analytic skills and research methods;
- Policy and leadership; and
- Cultural competency.

Addition of Social and Behavioral Methods Minor:

Currently, all nutrition students must complete a minor in either Epidemiology or Biostatistics.

We have added a third option for PHN students: Social and Behavioral Methods. Examples of courses from which students can select 10.0 credits from include:

SHDH288: Qualitative Research Methods in Public Health 2.5

SHDH501: Community-based Participatory Research 2.5

BIO212: Survey Research Methods in Community Health 5.0

RDS282: Economic Evaluation of Hlth. Policy & Program Mgmt.

Research Practicum Structure:

Historically, student practicums have been completed largely independent of faculty and included varying levels of research. In the revised concentration, students will work closely with Nutrition- or PHN-affiliated faculty to complete two 5-credit research practicums in their first two years of study.

Affiliated Faculty and Teaching Staff:

Harvard-affiliated faculty (listed below) who conduct PHN-related research have agreed to be involved with the PHN concentration and to mentor its students:

*S. Bryn Austin
Laura Bogart
Angie Cradock
Kirsten Davison
Cara Ebbeling
Allison Field*

*Teresa Fung
Matthew Gillman
Steven Gortmaker
Emily Broad Leib
David Ludwig
Emily Oken*



Kirsten Davison, Ph.D.

Director, Graduate Program in Public Health Nutrition
Donald and Sue Pritzker Associate Professor of Nutrition
Department of Nutrition
Department of Social and Behavioral Sciences

MORE NEW FACES

We are pleased to announce that several new staff have recently joined the Nutrition Department:



Renee Miciek is the new Senior Project Coordinator for the Transdisciplinary Research in Energetics and Cancer Center (TREC). She will be coordinating within and across TREC research and collaborations and will provide administrative support in the area of obesity and cancer prevention. Renee will be working with *Drs. Frank Hu, Jorge Chavarro*, and other TREC members. She also looks forward to working closely with additional TREC Centers at the University of Pennsylvania, University of California—San Diego, Washington University in St. Louis, and Fred Hutchinson Cancer Research Center. Renee comes to us from Boston University Medical Center and has recently worked with the Endocrinology, Diabetes and Nutrition Department there conducting research as the Senior Exercise Physiologist.

Brett Otis started working in the Nutrition Department this past October to assist with the Wordpress web migration, but has remained onboard and is now working part-time as a Media & Editorial Assistant. From web and graphic design to writing and editing, he is involved in a number of department projects, including the *Nutrition Source*. Originally from Litchfield County, Connecticut, Brett graduated from Emerson College in Boston in May 2012, where he majored in multimedia journalism while minoring in health communications and media relations.



Emily Phares, Publications Coordinator, will be working with *Dr. Lilian Cheung* as primary writer and editor for *The Nutrition Source* and *The Obesity Prevention Source* websites. Emily has an undergraduate degree in mass communication and received her EdM from Harvard Graduate School of Education, where she designed a specialized curriculum that focused on health & nutrition education (including coursework at HSPH). Prior to joining the Department of Nutrition, Emily worked for *Dr. Ronald Kessler* in the Department of Health Care Policy at Harvard Medical School. Emily is from New Orleans, LA, and enjoys cooking, reading and writing, and she also recently learned to surf in Costa Rica. She is excited to take on the role of Publications Coordinator and looks forward to making positive contributions to the Department of Nutrition.

Judy Shepro joined the Nutrition Department as a Grant Manager after working 3½ years in the Office for Sponsored Programs (OSP) as a Financial Analyst supporting both HSPH and HMS. Prior to working at OSP, she worked on PEPFAR. Judy is also a graduate of both the Harvard REACH Foundations and Intermediate Certificate Programs. As a Grant Manager here in the Nutrition Department, Judy will oversee and manage the pre- and post-award activities for a diverse portfolio of federal and non-federal grants, sub-awards, and contracts. She looks forward to bringing her varied research administration experience to her new role as a Grant Manager.





In A Nutshell

News Notes in Brief

NUTRITION DEPARTMENT HOSTS SPECIAL PANEL SYMPOSIUM TO CHALLENGE RECENT FINDINGS IN JAMA ON OVERWEIGHT AND MORTALITY

In a recent paper in the *Journal of the American Medical Association*, Katherine Flegal et al. suggested that in a comparison with normal weight individuals, overweight was linked with a lower risk of mortality. These findings understandably led to widespread confusion among the general public. In a response to these controversial conclusions, **Walter C. Willett, Chair of the Nutrition Department**, invited a number of renowned panelists, including **Frank B. Hu, Professor in the Nutrition Department**, and others, to discuss Flegal's findings and clear up public confusion over the link between weight and overall health. This panel, held on February 20, 2013, was attended by an overflow audience, and discussion was lively! To view its webcast, see: <http://www.hsph.harvard.edu/nutritionsource/does-being-overweight-really-reduce-mortality/>

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Young Leader Award for 2012-13.

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Eric Ding, Research Scientist, was recently named a **World Economic Forum's Global Shapers**, a group of selected outstanding young leaders under the age of 30. Eric was also honored by the **Boston Chamber of Commerce** with an **Outstanding**

Sally Akarolo-Anthony, Third Year Doctoral Student in Nutrition, was recently awarded the grant *Stars in Global Health, Grand Challenges Canada*, which is funded by the Government of Canada. The *Stars in Global Health* program supports bold ideas with big impact from the best and brightest talent, both in Canada and in low- and lower-middle-income countries, that use scientific/technical, social, and business innovation to address some of the most pressing global health problems. Dr. Akarolo-Anthony, who is PI of this grant, received an award of \$100,000, with potential for scale up to \$1,000,000. Her project involves the use of mobile phone technology to reduce obesity and physical inactivity in Africa.



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RECENT NUTRITION GRANT AWARDS

The following members of the Nutrition Department were recently awarded grants:

Eric Rimm, PI. NOURISH (Nutrition Opportunities to Understand Reforms Involving Student Health) Study. Sponsor: Robert Wood Johnson Foundation.

Anne Lusk, PI. Bicycle Research toward Creating a Bicycle-Friendly Vehicle. Corporate sponsor.

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Nutrition Faculty Members Teach Course in Bangalore, India

For the 4th consecutive year HSPH faculty members joined with colleagues from Tufts University and St. John's Research Institute (SJRI) in Bangalore, India to teach a course in Nutrition Research Methods this past January.

The Bangalore Boston Nutrition Collaborative (BBNC) was established in 2009 as an educational collaboration between nutrition scientists at SJRI, HSPH and Tufts. The two-week interdisciplinary course provides substantive knowledge and methodological skills in nutrition research, with topics including research ethics, nutritional epidemiology, biostatistics, survey design, proposal development, body composition analysis and several others. Junior faculty and students from dozens of institutions throughout India attended the course, as well as several attendees from Uganda, Nepal and other countries. HSPH faculty members **Christopher Duggan (Nutrition)**, Richard Cash (GHP), Ronald Bosch (Biostatistics), **Anuraj Shankar (Nutrition)** and SV Subramanian (SHDA) taught the course with SJRI and Tufts colleagues. Course Directors were Drs. Rebecca Raj (SJRI), Jeffrey Griffiths (Tufts) and **Duggan**.



Chris Duggan (top) and Anu Shankar (bottom) with participants in their course in Bangalore.

POSTDOC CORNER

Several postdocs from the Nutrition Department will be presenting research at the *American Heart Association Epidemiology and Prevention & Nutrition, Physical Activity and Metabolism 2013 Scientific Sessions on March 19-22 in New Orleans, LA*. These postdocs include: **Monica Bertoia**, who won a travel grant to attend this conference; **Andrea Chomistek**; **Shilpa Bhupathiraju**, who is a Jeremiah Stamler Award finalist; **Qi Sun**, who won the Mark Bieber Award; **Quibin Qi**; and **Deirdre Tobias**.

Amanda Sands, a student in Nutrition, is also attending. **Amanda** won the Trudy Bust Award. Congratulations to all of you!

EISENBERG'S CRASH COURSE IN HEALTHY COOKING LEADS TO SUCCESSFUL STUDY PUBLISHED IN JAMA

David Eisenberg, MD, Associate Professor in the Department of Nutrition, has helped to organize a "crash course" in healthy cooking, eating and lifestyle, titled "Healthy Kitchens, Healthy Lives—Caring for our Patients and Ourselves" since 2007. This 4-day, generally sold-out, conference is jointly sponsored by HSPH and the Culinary Institute of America. It is attended by doctors, nurses, nutritionists, restaurant chefs, fitness professionals, and institutional food service directors.

Dr. Eisenberg also led a follow-up study that surveyed attendees from the March 2010 HKHL conference to see if they were eating and cooking healthier after attending this "crash course," and whether they were also advising their patients to do likewise. Findings from this study, co-authored by *Walter Willett* and *Eric Rimm*, both professors in the Nutrition Department, and others, including *Adam Bernstein* (formerly of the Nutrition Department) were new and provocative. They suggested that after taking this course, attendees became more aware of their own caloric intake and subsequently ate more vegetables, nuts and whole grains. Additionally, they were able to better assess their patients' nutritional status and to successfully advise overweight and obese patients on healthier eating. The study, titled "See One. Taste One. Cook One. Touch One." was published online in *JAMA Internal Medicine* on February 18, 2013.



For more information about Dr. Eisenberg's "crash course" in healthy cooking, see <http://www.hsph.harvard.edu/news/features/eisenberg-healthy-cooking-course-helps-docs-help-patients/>.

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How Are Research Scientists in the Nutrition Department Funded? by Anne Lusk



Research Scientists at HSPH are independent researchers who can also serve as Principal Investigators on grants. Sometimes Research Scientists are funded through their collaborator's grants and, at other times, through their own grants. Grants may vary in the amount of overhead provided, and foundations provide 10-30%, NIH provides 61.5%, and corporations provide 70%. This overhead pays for the necessary costs at HSPH including office space, copying, and administrative services. In some Departments at HSPH, the Research Scientists are primarily supported through their collaborators' grants.

In the Department of Nutrition, four of the Research Scientists are on their collaborator's grants, while two are bringing in 10-15% overhead. However, four of the Research Scientists here are bringing in 61.5%-70% overhead. Thus, in addition to conducting research, the Research Scientists in the Department of Nutrition are also contributing to necessary overhead costs.

RUNNING AND BIKING FOR GOOD CAUSES

Leslie Unger, Project Coordinator, is a member of the Samaritans marathon team, and is required to raise at least \$5,000 for her race in the 2013 Boston Marathon. Leslie's goal is \$7,000 and she is almost 1/3 of the way there. Samaritans, Inc. is a non-profit organization that focuses on suicide prevention. If you want to help Leslie reach her goal, you can either donate directly to Samaritans, Inc. at <http://www.crowdrise.com/TeamSamaritans/fundraiser/leslieunger>, or you can visit Leslie in her office in Room 335. If you would like to learn more about Samaritans, Inc., please go to <http://samaritanshope.org>.

Alyssa Aftosmes, Project Coordinator, is also running in the 2013 Boston Marathon for the Boys and Girls Clubs of Dorchester. Alyssa must raise \$4,000 on their behalf. If you would like to make a donation to cheer Alyssa on or to learn more about the Boys and Girls Clubs of Dorchester, please see her page at: <http://www.razoo.com/story/Alyssa-Aftosmes-Fundraising-For-Boys-And-Girls-Clubs-Of-Dorchester-S-2013-Marathon-Team>.

You can also donate directly to Alyssa in Room 331.

Amelia Marsh, Academic Coordinator, will be participating in the Best Buddies Hyannis Port Challenge on June 1, 2013, and needs to raise \$1,350 for this project. Amelia will be bicycle riding for a total of 50 miles! The mission of Best Buddies is to establish a global volunteer movement that creates opportunities for one-to-one friendships, integrated employment, and leadership development for people with intellectual and developmental disabilities. If you would like to donate, please write a check payable to Best Buddies International or give cash to Amelia in Room 305. For more information about Best Buddies, please see: <http://www.kintera.org/faf/donorReg/donorPledge.asp?ievent=1028098&lis=1&kntae1028098=638A866D08A147DB990DC28C7D6721CB&supId=378310889>

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Email Hilary Farmer (hfarmer@hsph.harvard.edu) with any comments, corrections, or suggestions for future issues.