

NUTRI NEWS

The Department of Nutrition

August 2021

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NEWS FROM AROUND THE NUTRITION DEPARTMENT

WELCOME STUDENTS BACK TO CAMPUS!

On August 24th, the Department held a virtual orientation session to welcome five new PhD in PHS students and 16 MPH-65 Nutrition students. This was a good opportunity for the students to learn more about their academic programs and to engage with faculty and meet their peers. Our department is fortunate and proud to attract the best and brightest students from diverse backgrounds and from across the country and different parts of the world. Despite the continuing challenges posed by the COVID-19 pandemic, everyone is excited about starting the fall semester and joining our community.

GRANTS AND FUNDING

A New Center Grant has been awarded by NIH to an interdisciplinary team of investigators at HSPH, HMS, and the Broad Institute to establish a Dietary Biomarkers Development Center (DBDC) at Harvard. The long-term goal of the Center is to establish a rigorous and highly productive resource, available to the NIH, USDA, and external investigators, and to systematically catalog validated metabolomic signatures of intakes of foods/food groups that are commonly consumed in the US. This project will 1) characterize pharmacokinetics and establish calibration curves of novel food biomarkers using data from the controlled feeding studies; 2) evaluate the identified biomarkers' performance in an already completed 6-week controlled feeding trial of three healthy dietary patterns; and 3) validate the identified dietary intake biomarkers in observational cohorts with repeated measures of diet, nutrient biomarkers, metabolome, and gut microbiome. **Dr. Frank Hu**, Chair and Professor of Nutrition and Epidemiology, will serve as the PI and Director of the Center. **Dr. Clary Clish**, Senior Director of the Metabolomics Platform and Institute Scientist at the Broad Institute, will serve as MPI of the grant and the Director of the Metabolomics Core. **Dr. Shilpa Bhupathiraju**, Assistant Professor of Medicine at Channing Division of Network Medicine, BWH and HMS, and Assistant Professor of Nutrition at the Department of Nutrition, HSPH, will serve as the Project Director for the DBDC. In addition, **Dr. Frank Sacks**, Professor of Cardiovascular Disease Prevention at the Department of Nutrition HSPH, will serve as the Director of the Intervention Core; **Dr.**

Liming Liang, Associate Professor of Statistical Genetics in the Departments of Epidemiology and Biostatistics at HSPH, will serve as Director of the Data Analysis Core; and **Dr. Qi Sun**, Associate Professor in the Departments of Nutrition and Epidemiology at HSPH, and Associate Professor of Medicine at Channing Division of Network Medicine, BWH/HMS, will serve as Director of the Biomarker Project.

Dr Marta Guasch-Ferre, PhD, Senior Research Scientist, Dept of Nutrition, has been awarded an R21 grant from the NIH titled "Circulating Plasma Metabolites, Lifestyle Factors, and Mortality Risk" This is a 2-year grant that will begin on August 15, 2021. The project aims to identify metabolite profiles and networks associated with total mortality and longevity, and investigate whether the metabolomic signatures of a healthy lifestyle score are associated with the risk of mortality and longevity in U.S. and Mediterranean populations. This study has the potential to identify novel metabolic signatures of both mortality and longevity and improve our understanding of how lifestyle factors modulate metabolites and mortality risk. Dr Guasch-Ferre is the PI of this grant.

PUBLICATIONS

Abrania Marrero, PhD Candidate in Population Health Sciences | Department of Nutrition; and Graduate Fellow | Abigail Adams Institute, has published an essay as an Agents of Change in Environmental Justice fellow in *Environmental Health News*. Her essay details the need in academia to resist research canon, including in efforts to improve health and nutrition in 'vulnerable populations,' to better honor power, agency, and food sovereignty. You can find her article here: <https://www.ehn.org/food-security-in-puerto-rico-2653505167.html>

DISSERTATION DEFENSES

Ibraheem Abioye, PhD student in Population Health Sciences & Nutrition, successfully defended his dissertation titled "*Iron Nutrition, Hematologic Status, and Infections in Tanzania*" on August 10, 2021.

NEW FACES IN THE DEPARTMENT



Dr Jessica Zamborain Mason
Postdoctoral Research Fellow

Since she was a child, growing up in the snowy mountains of the Spanish Pyrenees, Jessica has been fascinated by the immensity of the oceans and the creatures within them. This fascination grew with time, making Jessica complete a bachelor's degree in Marine Science (Oceanography) at the University of Vigo (Spain) and undertake internships at the University of Baja California (Mexico) and at the Algarve University (Portugal). Throughout these learning adventures in different parts of the world, one thing was clear to her: the degrading state of the world's oceans and the dependence of human societies on them. Thus, Jessica became interested in the interconnections between seafood and people. She noticed the importance of accounting for humans as central elements in ecosystems and decided she wanted her career to focus on contributing towards the ecologic, social and economic sustainability of the world's fisheries.

Jessica's research combines statistical and ecological models with empirical observational data to increase our understanding of human-environment interactions, the performance of natural resources, and to inform resource management and policy. For her Honours, Jessica studied the impact of human development on marsh and seagrass ecosystems from the North Atlantic Spanish coast. Then, she completed a Master's degree in Fisheries Biology and Management at James Cook University (Australia) where she used mathematical models and network theory to increase our knowledge on how marine reserve networks should be designed to promote the persistence of fish metapopulations. Jessica has recently completed her PhD at James Cook University and the ARC Centre of Excellence of Coral Reef Studies under the supervision of **Professors Sean Connolly, Joshua Cinner** and **Aaron MacNeil**. For her thesis, Jessica worked on an interdisciplinary project that covered more than 2000 coral reefs around the globe. Her main goal was to estimate sustainable reference points and assess the sustainability status of multispecies coral reef fisheries at global and local scales. As part of this, Jessica has worked closely with fishing-dependent communities (e.g., Papua New Guinea), experiences which have made her think about sustainable seafood and effective and equitable fisheries management as a way to tackle prevalent micronutrient deficiencies.

Jessica has just joined the Department as a postdoctoral research fellow under the supervision of **Dr Chris Golden**, Assistant Professor of Nutrition & Planetary Health. Here, Jessica is looking forward to getting her models dirty and full of nutrients! Jessica aims to take a nutritional lens to fisheries, integrating nutritional outcomes into fisheries reference points and examining the consequences of climate change, human use and management on natural resources, human nutrition and public health. Overall, she aims to improve our understanding on nutrition-sensitive approaches to fisheries management and policy in the context of environmental change. Jessica likes learning about statistical and theoretical modelling, public health, and natural resource management and policy. She also loves nature and sports and is new in town, so feel free to say Hi to her if you would like to know more about what she does, if you would like to have a chat about what you do, or if you just have some useful tips about being in the Department, in Boston, and in the United States!



Her Twitter account is: [Jessica Zamborain Mason \(@JZamborainMason\) / Twitter](https://twitter.com/JZamborainMason)



***Claudia Martínez PhD., MSc., LN.
Fogarty Global Health Fellow***



Dr. Claudia Martínez received a B.S. in nutrition at the University of Guadalajara. She completed a Master in Sciences with a concentration in Maternal-Child Nutrition at the same University. Afterwards, she joined the University of Guadalajara as a professor in undergraduate nutrition. Dr. Martínez worked for several years as a nutritionist and diabetes educator in the public health system. She is an active mentor, working with undergraduate and master students as well as an organizer of continuing training courses.

In 2020, Dr. Martínez earned a Ph.D. in Population Nutrition Sciences from the National Institute of Public Health México. She joined the Harvard School of Public Health as a visiting scientist at the Department of Nutrition. Her doctoral project focused on the pattern of breakfast and meal frequency associated with weight change and the incidence of diabetes in a cohort of Mexican Teachers (MTC) that includes more than 100,000 women with follow-up since 2006. Her research interests are diet, lifestyle, and body weight at different stages of life to prevent chronic non-communicable diseases as diabetes, cancer, and cardiovascular disease.

Recently, Dr. Martínez became a Fogarty Global Health Fellow 2021-2022 at Harvard T.H. Chan School of Public Health under the mentorship of ***Drs. Josiemer Mattei Ph.D., M.P.H.*** and ***Martín Lajous Sc.D., M.D*** from the Center for Research on Population Health at the National Institute of Public Health, Mexico. Her postdoctoral research will elucidate nutritional and early life factors and diet of adolescence associated with cancer and gestational diabetes with a life-course perspective in women of MTC. She loves dancing, walks among trees, and photography.

Olivia Iles
Research Assistant

Olivia Iles is a research assistant working with **Drs. Lilian Cheung** and **Kana Wu** to investigate the effects of a school-based mindfulness curriculum on child health and development. She is a current master's student studying Human Development and Education at Harvard's Graduate School of Education. Prior to graduate school, Olivia spent two years teaching children in elementary schools in Spain, and earned her Bachelor's degree in Statistics from Brown University.

In her free time, Olivia enjoys painting, drawing, and exploring the mountains and beaches of New England with her dog, Ruby.



MONDAY NUTRITION SEMINARS

The Department of Nutrition holds its weekly **Monday Nutrition Seminar Series** every Monday throughout the academic year. The talks are varied, but they highlight the many different aspects of cutting-edge research that is currently being conducted in the fields of nutrition and global public health. These seminars are held from **1:00-1:50 pm** and are free and open to the public. Because of COVID-19, the seminars have been presented via Zoom since March of 2020, and this zoom format will continue for now. A zoom link for viewing will be available one week prior to each seminar.

Our September 2021 speakers will be:

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|----------------|--|
| Sept 6 | LABOR DAY (NO MONDAY SEMINAR) |
| Sept 13 | <i>Dr Christina Marie Dieli-Conwright</i> , Associate Professor of Medicine, HMS – “Utilization of an ‘Exercise Is Medicine’ Approach to Optimize Treatment and Health Outcomes among Cancer Survivors” |
| Sept 20 | <i>Dr Shilpa Bhupathiraju</i> , Assistant Professor in the Department of Nutrition, HSPH – TBD |
| Sept 27 | TBD |

WHERE ARE THEY NOW?

Dr Jennifer Falbe, ScD 2013

The Nutrition Department has seen many top students graduate from its ranks over the years who have gone on to pursue highly successful careers afterwards. These students have often followed very different paths from the traditional one, but they have all made important contributions to the fields of public health and nutrition. *NutriNews* will feature stories of some of our alumni from time to time to show how they have benefitted from their studies here.



Dr. Falbe graduated with a dual doctorate in Public Health Nutrition and Epidemiology, in 2013. While at HSPH, Dr. Falbe studied the relationships between screen time, sleep, obesity, and diet quality in the Growing Up Today Study 2 Cohort and in the Massachusetts CORD Study, a CDC-funded community intervention to prevent childhood obesity.

After graduating from HSPH, Dr. Falbe took a position as postdoctoral research fellow at the UC Berkeley School of Public Health, where she successfully competed for an American Heart Association postdoctoral fellowship. Dr. Falbe led a series of studies evaluating the nation's first sugar-sweetened beverage excise tax in Berkeley, CA. Dr. Falbe's other research examined the effects of a culturally-tailored primary care intervention to address obesity in Latinx children and identified potentially addictive properties of SSBs.



Dr. Falbe is currently the Assistant Professor of Nutrition and Human Development in The Department of Human Ecology at the University of California, Davis. Dr. Falbe successfully obtained an NIH/NIDDK K01 Career Development Award to study warning labels for reducing consumption of sugar-sweetened beverages. Her other research has focused on added sugars warnings for restaurant settings and evaluating healthy retail programs and policies. In her free time, Dr. Falbe enjoys backpacking, gardening, and spending time with her dog.

MORE RESEARCH NEWS

Enjoy your fresh summer berries—they are among the healthiest foods you can eat!



According to experts like **Dr Eric Rimm**, Professor of Epidemiology and Nutrition, berries are among the top sources of vitamins, minerals, and disease-fighting nutrient. They also can help reduce the risk of many age-related conditions.

Rimm states in an August 2, 2021, *Washington Post* [article](#) that “On average, people who eat more berries seem to live a little bit longer”. He suggested eating a cup of fresh berries a day when they’re in season to reap the health benefits.

The article further noted that berries provide potassium, magnesium, vitamins C and K, fiber, and prebiotics—carbohydrates that help promote a healthy gut. Other studies co-authored by Harvard Chan School researchers have found that eating blueberries can [lower the risk of Type 2 diabetes](#); that eating foods high in anthocyanins (mostly blueberries and strawberries) can [help people keep weight off](#); and that berry consumption can [reduce the risk of heart attack](#) and [boost learning and memory](#).

Rimm also adds that frozen berries provide the same health benefits as fresh.

From: <https://www.hsph.harvard.edu/news/hsph-in-the-news/fresh-berries-are-among-the-healthiest-foods-you-can-eat/>

Read the *Washington Post* article: https://www.washingtonpost.com/health/why-fresh-berries-are-the-most-healthy-age-fighting-foods-around/2021/07/30/eebf11e8-ec05-11eb-8950-d73b3e93ff7f_story.html

Read other Harvard Chan studies:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4073481/>

<https://pubmed.ncbi.nlm.nih.gov/26823518/>

<https://pubmed.ncbi.nlm.nih.gov/23319811/>

<https://pubmed.ncbi.nlm.nih.gov/22535616/>

Small steps can make a difference in reducing sugar consumption

Many people turned to baking and consuming comforting treats during the pandemic. Experts in a recent *Consumer Reports* article explained how high amounts of added [sugars](#) can be harmful to health, and offered advice for those looking for ways to cut back.

Dr Frank Hu, Fredrick J. Stare Professor of Nutrition and Epidemiology at Harvard T.H. Chan School of Public Health, noted that added sugars can easily add [excess calories](#) to the diet, ultimately increasing risk of weight gain and health consequences such as [diabetes](#), [heart disease](#), and some types of [cancer](#).

"If you consume too much sugar, your insulin stays elevated for extended periods of time," Hu explained in the July 18, 2021, article, noting that this makes insulin less effective at controlling blood sugar. In addition, he said, fructose is metabolized in the liver, where it increases fat production, raising the risk of chronic inflammation and other negative outcomes.

Other experts quoted in the story suggested making a few simple changes to ease into lower sugar consumption. These include reading nutrition labels on products where added sugars can unexpectedly hide—such as condiments and packaged breads—and opting for those with the lowest sugar content. In addition, purchasing unsweetened [coffee](#), cold drinks, and foods like oatmeal or yogurt and adding your own sweeteners and flavors may help train the palate away from excessive sweetness, the article suggested.

Read Consumer Reports article: <https://www.consumerreports.org/nutrition-healthy-eating/how-to-eat-less-sugar-a3012364754/>

NUTRITION SOURCE UPDATES

Spotlight on Mindful Eating

Mindful eating stems from the broader philosophy of mindfulness, a widespread, centuries-old practice used in many religions. Learn seven practices of mindful eating:

<https://www.hsph.harvard.edu/nutritionsource/mindful-eating/>

Meal Prep

Food preparation and storage tips to get started on a helpful healthy eating strategy amidst busy weekday schedules.

<https://www.hsph.harvard.edu/nutritionsource/meal-prep/>

Food Feature: Yogurt

Did you know that references to yogurt and health date back to 6000 BCE? Learn about the history and current research surrounding this fermented food.

<https://www.hsph.harvard.edu/nutritionsource/yogurt/>

From: Iles, Olivia <oliviailes@hsph.harvard.edu>

Sent: Tuesday, August 17, 2021 3:25 PM

To: Farmer, Hilary A <hfarmer@hsph.harvard.edu>

Subject: Re: Introducing you in Nutrition newsletter

If you would like to remain current as to what is happening in the field of nutrition, please be sure to view our Nutrition Source website for the latest updates!

(See: <https://www.hsph.harvard.edu/nutritionsource/>)

SAVE THE DATE!

We are pleased to announce that the Department of Nutrition at the Harvard TH Chan School of Public Health will hold its 16th Annual Stare-Hegsted Lecture on Monday, November 8, 2021, from 1:00-2:15 pm.*

Dr. Shiriki K. Kumanyika, PhD, MS, MPH, Research Professor, Community Health and Prevention, Drexel University, will be this year's speaker. She is Founder and Chair of the Council on Black Health (formerly the African American Collaborative Obesity Research Network (AACORN)). CBH is a national network that seeks to have a significant impact on health in Black communities through collaboration, discovery, and innovation. In addition to her Drexel affiliation, Dr. Kumanyika retains an appointment as an Emeritus Professor of Epidemiology at the University of Pennsylvania (Penn). She was the founding director of Penn's Master of Public Health program.

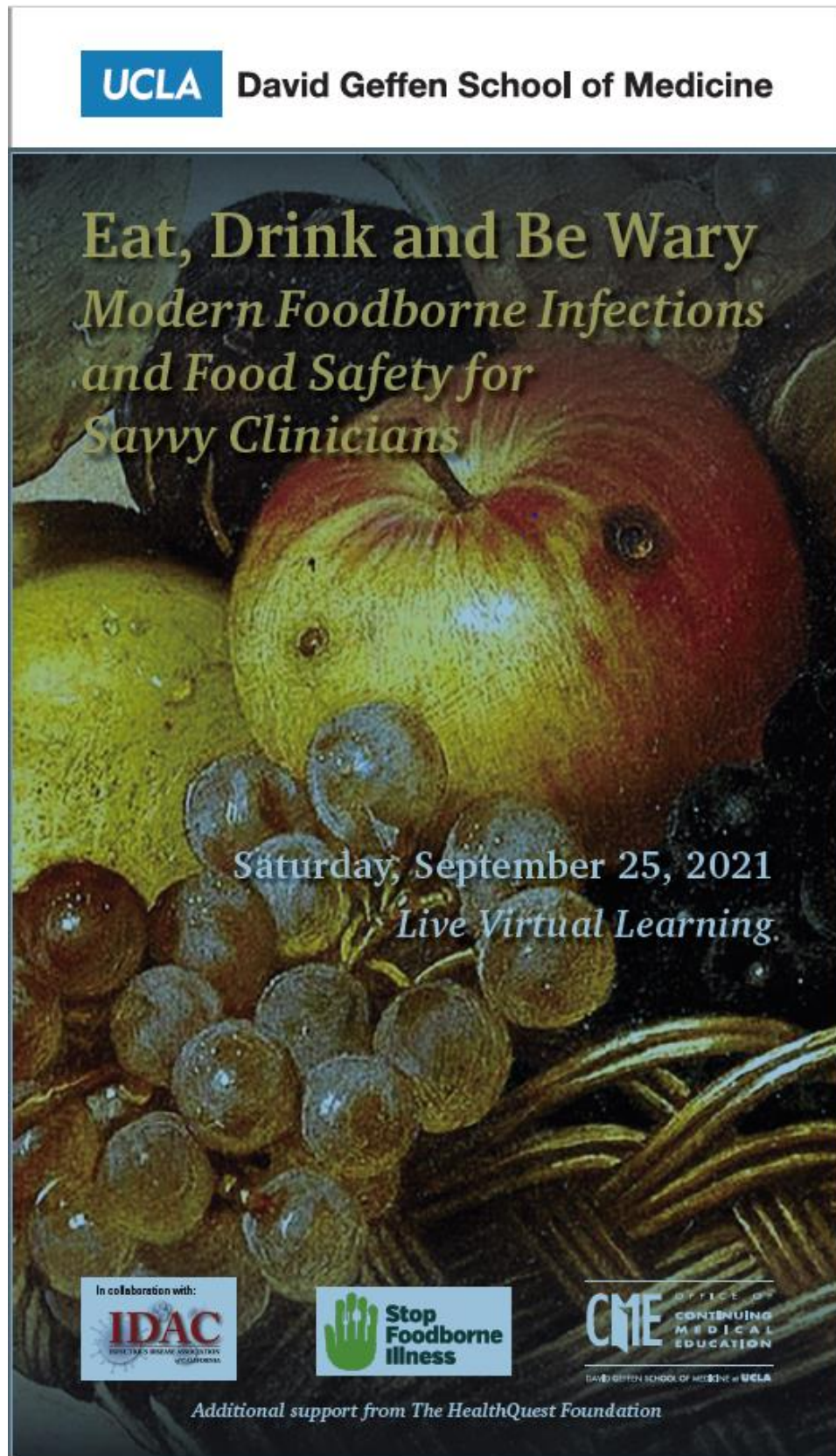
Dr. Kumanyika's research has focused on identifying effective strategies to reduce nutrition-related chronic disease risks, with a particular emphasis on achieving health equity for black Americans. Over more than three decades, she led or collaborated on single- or multi-center randomized clinical trials or observational studies related to obesity, sodium intake, and other aspects of diet and lifestyle. Several of these studies evaluated interventions to promote healthy eating and physical activity in black children or adults in clinical or community-based settings. Her recent research with Council on Black Health colleagues has included studies of the targeted marketing of unhealthy foods and beverages to black children and adults and food price influences on food purchases of black household food shoppers.

Dr. Kumanyika was Vice-Chair of the HHS Secretary's Advisory Committee on Healthy People 2020 objectives and is also involved in efforts to develop Healthy People 2030. She is a past president of the American Public Health Association and a member of the National Academy of Medicine (NAM, formerly known as the Institute of Medicine (IOM)). Dr. Kumanyika has extensive experience in advisory roles related to public health and nutrition policy in the US and abroad. She is currently chair of the NAM Food and Nutrition Board, a member of the CDC Task force on Community Preventive Services, Co-chair of the Policy and Prevention Section of the World Obesity Federation, a member of the Lancet Commission on Obesity, and a nutrition policy advisor to the World Health Organization and the World Cancer Research Fund.

***This will be a Zoom presentation. Should current Covid restrictions be lifted by that time, Dr Kumanyika will deliver her lecture in person, time and venue TBD.**

MARK YOUR CALENDARS NOW!

To register, please visit: www.cme.ucla.edu/courses/foodborne2021



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Eat, Drink and Be Wary

Modern Foodborne Infections and Food Safety for Savvy Clinicians

Saturday, September 25, 2021
Live Virtual Learning

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