

# **NUTRI NEWS**

## The Department of Nutrition

September 2018

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## NUTRITION DEPARTMENT WELCOMES FIVE NEW STUDENTS!

Please be sure to welcome the following new doctoral students to our Department and wish them all success in their future academic endeavors.



#### Cristina Gago

Born and raised in Los Angeles, Cristina attended the University of Southern California to pursue both a BS in Human Biology and an MPH in Global Health Leadership, during which she focused most of her work on community nutrition education projects (which is what inspired her to apply to PhD programs in nutrition). After graduating, she immediately packed her bags and moved to Bogotá, Colombia to work at the Universidad Nacional de Colombia with the support of a Fulbright grant.

#### Xiao Gu

Xiao will be joining the Nutrition field of study. He graduated from Boston University with a BS degree in Communications and received his ScM degree in Epidemiology from Brown University School of Public Health. Xiao's research interest focuses on dietary determinants of aging diseases, including heart failure and cognitive functions, and cardio-metabolic health. Xiao has been working on research projects in the Women's Health Initiative, the Boston Puerto Rican Health Study, the Growing Up Today Study and the NHANES.





## Sophia Hua

Sophia received her BS in psychology and her MPH from Yale University before working as a project coordinator at the Perelman School of Medicine. Her research interests lie in obesity prevention via environmental and behavioral changes. She has previously conducted research related to healthier vending machines, menu label messaging, and the impact of beverage taxes.

#### Abrania Marrero-Hernandez

Abrania is a graduate of Tulane University with a dual bachelor's degree in psychology and public health. Originally from Puerto Rico, she hopes to contribute to food systems research and empower her home's communities through agricultural development and nutritional health.





## Mary Kathryn Poole

Mary Kathryn has nearly a decade of experience in public health nutrition with positions in the academic, government and nonprofit sectors, including her current work at the Harvard Prevention Research Center. Her research interests are focused on evaluating nutrition and obesity policies, particularly those that impact children. Mary Kathryn completed her MPH at Tulane University and majored in psychology at Davidson College.

## NEWS AROUND THE NUTRITION DEPARTMENT

**Dr Christopher Duggan,** Professor in the Department of Nutrition, and his group at HSPH with colleagues in India have published new findings about the importance of vitamin  $B_{12}$  for maternal and child health. In addition to being associated with maternal anemia and marginal diets, researchers now know that poor  $B_{12}$  levels in mothers correlate with infant status, and that  $B_{12}$  supplementation to mothers improves child development.

Thomas S, Thomas T, Bosch RJ, Ramthal A, Bellinger DC, Kurpad AV, Duggan CP, Srinivasan K. Effect of Maternal Vitamin B12 Supplementation on Cognitive Outcomes in South Indian Children: A Randomized Controlled Clinical Trial. Matern Child Health J. 2018 Jul 12. doi: 10.1007/s10995-018-2605-z.

Finkelstein JL, Kurpad AV, Thomas T, Srinivasan K, Duggan C. Vitamin  $B_{12}$  status in pregnant women and their infants in South India. Eur J Clin Nutr. 2017 Sep;71(9):1046-1053. doi: 10.1038/ejcn.2017.29.

Dr. Daniel (Dong) Wang, Research Fellow, was recently awarded a K99/R00 grant on the first submission from the NIH-National Institute of Diabetes and Digestive and Kidney Diseases. This project will test whether the gut microbiota modifies the beneficial effects of the Mediterranean diet and polyphenol-rich foods for the prevention of type 2 diabetes. Dr. Meir Stampfer is his primary mentor and Drs. Curtis Huttenhower, Andy Chan and Wendy Garrett are his co-mentors during the K99 stage of this grant. Dr. Frank Hu is also a member of his advisory committee. During the 5-year grant period, Dr. Wang will collaborate with Dr. Robert Kaplan and Dr. Qibin Qi at Albert Einstein College of Medicine in the Hispanic Community Health Study / Study of Latinos and Dr. Iris Shai at Ben-Gurion University of the Negev and Dr. Ilan Youngster at Tel-Aviv University in the DIRECT-PLUS Trial in Israel. This project will take an integrated multi'omics approach to collect / leverage multiple 'omics data, including metagenomics, metatranscriptomics and metabolomics, and perform high-resolution functional profiling of gut microbiota. Findings from this grant are expected to provide novel mechanistic evidence on the health benefits of the Mediterranean diet, which will have substantial public health impact by informing more effective and precise dietary prevention of diabetes.

**Dr Miguel Á. Martínez González**, **MD, PhD, MPH**, Adjunct Professor of Nutrition, has just published a book titled "SALUD A CIENCIA CIERTA" (Science-based Health) which contains tips for a healthy life without falling into the traps of certain food and beverage industries. After having studied a population of more than 20,000 people in the SUN ("Seguimiento Universidad de Navarra") cohort for 2 decades, and having coordinated the Network of researchers for the PREDIMED trial, the most important trial ever done on food patterns and cardiovascular health, Prof. Martinez-Gonzalez presents in clear and easy-to-understand language what medicine knows today about some of the problems that represent top concerns for citizens: weight control, ideal diet, cholesterol, physical activity, blood pressure, health check-ups, alcohol consumption, tobacco addiction, stress and even happiness.



For example, the book addresses such questions as why do people find it hard to lose weight? Why do we eat those items that we should immediately remove from our pantry? How does the food and beverage industry influence our diet? Why is the huge consumption of white bread in Spain one of the worst foods out there? What is worse, sugar or fat? Why are certain food and beverage industries as bad today as tobacco companies were 50 years ago?

This is an informative book that challenges the tactics of certain food and beverage industries - the new tobacco industry, in the author's own words - and that unravels how companies create false dietary needs to sell their surpluses, thus attacking public health. Although initially published in Spanish, the book will also be published in other languages in the near future.

All royalties of this book will be designated to the funding of large cohort studies to evaluate diets and lifestyles. For more information: https://www.planetadelibros.com/libro-salud-a-ciencia-cierta/272065

**Dr Jorge Chavarro**, Associate Professor of Nutrition and Epidemiology, has been awarded a grant from NICHD designed to evaluate the relation of being born by cesarean section with childhood trajectories in body composition and markers of cardiometabolic risk and to evaluate potential biologic mediators.

In addition, Fertility and Sterility, the journal of the American Society for Reproductive Medicine, has dedicated the section on topic review of its September 2018 issue to the role of nutrition and fertility. **Dr** Chavarro co-edited this section, and several current and past members of our department (specifically Audrey Gaskins, Feiby Nassan, Yu-Han Chiu and Lidia Minguez-Alarcon) contributed short review articles.

**Selma Gicevic**, doctoral student, successfully defended her doctoral thesis titled "Dietary diversity, dietary quality and sustainable dietary surveillance" on June 26, 2018. Here thesis committee members were **Drs Walter Willett (chair)**, **Teresa Fung** and **Bernard Rosner**.

Also, as a recipient of IMMANA Fellowship *Selma Gicevic* will begin a postdoctoral research project this fall titled "Developing and validating a diet quality assessment tool for global use" under the mentorship of *Drs. Walter Willett* and *Japhet Killewo*. The project will include validation of diet quality assessment tools (questionnaires developed based on the Prime Diet Quality Score) across different country settings, in Bosnia, the United States and Tanzania.

**Dr. Josiemer Mattei**, Assistant Professor, and a team of investigators at FDI Clinical Research of Puerto Rico and University of Puerto Rico received a grant award from the NIH-National Institute on Minority Health and Health Disparities for a complementary study to the current PROSPECT observational cohort that Dr. Mattei leads in Puerto Rico. The new project will assess food and water shortages and social connectedness after hurricane Maria, and how these triggered physiological stress responses (i.e. allostatic load) using a mixed methods model that combines quantitative data from PROSPECT and qualitative narrative interviews.

*To read more:* <a href="https://www.hsph.harvard.edu/nutrition/2018/09/24/researching-chronic-disease-puerto-rico-hurricane-maria/">https://www.hsph.harvard.edu/nutrition/2018/09/24/researching-chronic-disease-puerto-rico-hurricane-maria/</a>

**Nathalie Marchand**, Doctoral Student in Nutrition and Epidemiology, is scheduled to defend her doctoral dissertation titled **Diet**, **Lifestyle**, **and Hip Osteoarthritis in Women** in the Nutrition Library (Room #317) on October 22nd from 2:00 to 4:00 pm.

Ming Ding, Postdoctoral Fellow, has received funding from the National Institute on Aging for her R03 grant, titled Examining Trajectories of Lifestyle Factors Associated with Healthy Aging and Longevity Using a Novel Mixture Model. Her proposal aims to develop a novel mixture model with smoothing function and apply it to examine associations of trajectories of lifestyles with healthy aging and longevity in the NHS and HPFS. The model development is highly cost-effective by adopting a modified expectation-maximization (EM) algorithm.

## NEW FACES IN THE DEPARTMENT



## Miguel Ruiz Canela Lopez Visiting Scientist

I am an Associate Professor at the University of Navarra, Spain. I work there with *Prof. Miguel Martinez* at the Department of Preventive Medicine and Public Health. Since 2013 I have participated in several projects about Metabolomics with samples from the PREDIMED study. These projects have been an opportunity for me to visit the Nutrition Department on several occasions and, finally, I have been able to do a longer research stay. I will be here until the end of December 2018

working with Dr. Frank Hu on a competing renewal grant about omics and diabetes. I am living in Newton with my family. My wife is a literature scholar and she is doing research on narrative and illness at Boston College. My 4 children will attend public schools at Newton and are very excited to be living in the States. I hope to continue learning through my work at this lively department as well as to enjoy a real New England experience. Meanwhile, I hope to share my experience of the Mediterranean Diet that I bring from Cordoba, a beautiful city at the South of Spain where I grew up.

## 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 **1:00-1:20 pm in Kresge 502** at the Harvard T.H. Chan School of Public Health. The seminars are free and open to the public.

The following speakers will discuss their work in September:

Oct 1	Dr Anne Marie Darling, Postdoctoral Research Fellow, Department of Global Health &
	Population, "Maternal weight gain and pregnancy outcomes in Tanzanian pregnant women:
	A potential target for intervention?" (NGHP)

Oct 8	Columbus Day—No Monday Nutrition Seminar
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Oct 29 Stare-Hegsted Lecture at 4:00 pm—No Monday Nutrition Seminar

For more information, contact: hfarmer@hsph.harvard.edu



**Dr P K Newby**, Adjunct Associate Professor of Nutrition, has recently published a new book titled "Nutrition Confusion Ends Here: Evidence-Based Answers to Essential Questions." For more information: <a href="https://pknewby.com/nutrition-health/">https://pknewby.com/nutrition-health/</a>

## EVERGREEN Group Makes Special Visit to Legal Sea Foods Facility!



A subgroup of EVERGREEN was able to receive an early morning tour of Legal Sea Foods before a meeting to discuss menus and recipes **Drs. Eric Rimm, Alyssa Moran, Joshua Petimar**, and doctoral student **Aviva Musicus** were invited to tour the restaurant chain's fish processing plant and kitchen. They will be working with the restaurant to provide insights and enhancements for an even more delicious menu!

After suiting up for food safety, the group was led through the company's full processing plant, which was kept at a very low temperature to preserve the seafood. Highlights from the tour included seeing the tanks where all of the live lobsters are kept, the quality control lab where they levels of mercury and other potential contaminants are tested, and the kitchen where all sauces and soups are prepared, frozen, and packaged to ensure consistency across all Legal Sea Foods restaurants.

## MORE NUTRITION IN THE NEWS

## Study suggests no amount of alcohol is safe, but Dr Walter Willett not convinced

A recent study in *Lancet* analyzing the global impact of alcohol suggests that even moderate drinking is unsafe for health. The study found that alcohol was the seventh leading risk factor for premature death in 2016, and that it contributed to 2.8 million deaths worldwide—2.2% of all female deaths and 6.8% of all male deaths that year.

The study found that, compared with non-drinkers, people who had one drink per day had a 0.5% increased risk of developing one of 23 alcohol-related health problems. These ranged from road injuries to tuberculosis to breast cancer. However, the increase is negligible, and amounts to only about four additional deaths per 100,000 people per year worldwide. The study further suggests that the risks increase with every daily drink consumed, with those individuals who drink 5 drinks/day increasing their risk of health problems by 37%. According to this study, the risks outweigh any potential health benefits from moderate drinking.

Nevertheless, *Dr Walter Willett*, Professor of Epidemiology and Nutrition, remains unconvinced. Willett told *Time* in an August 24, 2018 article that while there is "no question" that heavy drinking is harmful, there are plenty of data supporting the benefits of moderate drinking. He also said that it is misleading to lump the entire world together when assessing alcohol's risk. "Our decisions about drinking in the United States shouldn't be influenced by what alcohol does to tuberculosis," he said.

Willett further added that there are risks and benefits of alcohol consumption and said it is "important to have the best information about all of those and come to some personal decisions, and engage one's health care provider in that process as well."

**From:** https://www.hsph.harvard.edu/news/hsph-in-the-news/alcohol-risks-benefits-health/?utm source=SilverpopMailing&utm medium=email&utm campaign=Daily%20Gazette%2020180830

Read the Time article: A New Study Says Any Amount of Drinking Is Bad for You. Here's What Experts Say

#### Learn more:

Alcohol: Balancing Risks and Benefits (The Nutrition Source)
Alcohol in moderation can be good for the heart (Harvard Chan School news)
Blacks may not receive same health benefits from moderate alcohol drinking as whites (Harvard Chan School press release)

## New study suggests moderate amount of carbs is healthiest diet of them all

A new study suggests that the healthiest diets include moderate amounts of carbohydrates, and that this is healthier than a low-carb diet.

The large-scale study tracked 15,000 Americans and found that people who eat a moderate amount of carbohydrates (50% to 55% of their daily calorie intake) had lower mortality rates over a 25-year period than those who typically ate low-carb meals (40% or less of their daily calories) or high-carb meals (70% or more of their calories). Similar results were found when the researchers examined data on carbohydrate intake from several multinational studies.

According to an August 17, 2018 article in *The Independent*, this can be explained by the fact that many low-carb diets replace carbohydrates with unhealthy fats and proteins in meat and dairy products. This can increase risks of cancers and heart disease. The study further found that the healthiest low-carb diets were those that included a lot of vegetables, plant oils, and legumes in place of carbs.

According to study co-author *Walter Willett*, Professor of Epidemiology and Nutrition, "Too much and too little carbohydrate can be harmful but what counts most is the type of fat, protein, and carbohydrate".

Read the Independent article: Low carb diets shorten your life unless you are mostly vegetarian, study suggests

#### Learn more

Carbohydrates (Harvard Chan School's Nutrition Source)

From: https://www.hsph.harvard.edu/news/hsph-in-the-news/eat-moderate-amount-of-carbs-for-health/

Visit the Harvard Chan School website for the latest news, press releases, and multimedia offerings.

## NUTRITION SOURCE UPDATES

#### **Back-to-School Fuel**

Amidst hectic school-year schedules, here are some tips to make sure healthy packed meals aren't an afterthought. <a href="https://www.hsph.harvard.edu/nutritionsource/2016/09/21/back-to-school-fuel/">https://www.hsph.harvard.edu/nutritionsource/2016/09/21/back-to-school-fuel/</a>

#### **Food Feature: Bananas**

There's a bit of confusion surrounding bananas. Some people consider this iconic fruit a healthy choice, while others avoid it. Learn why.

https://www.hsph.harvard.edu/nutritionsource/food-features/bananas/

#### Plat Manje ki Bon pou Lasante

The Healthy Eating Plate, now translated into Haitian Creole.

https://www.hsph.harvard.edu/nutritionsource/healthy-eating-plate/translations/haitian-creole/

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/)

## RECIPE CORNER

## Salmorejo

(Dr Miguel Ruiz-Canela, Visiting Scientist)



This is a typical plate from Cordoba (south of Spain).

#### Ingredients:

150 grams extra-virgin olive oil

100 gr "jamon serrano" (Serrano ham) (optional, to decorate)

4 hard-boiled eggs (optional, to decorate)

1000 gr ripe tomatoes (the quality of them is the key)

15-30 gr of vinegar

salt

150 gr of bread (day-old baguette)

Puree all ingredients and with machine running gradually mix with the olive oil (the trick is to get a perfect emulsion)

The Department of Nutrition is currently seeking candidates for the position of Assistant or Associate Professor of Integrative Genomic Epidemiology. Please feel free to share this with your colleagues!

For more information: https://academicpositions.harvard.edu/postings/8319

OHRA Welcome Back Updates - Come hear the latest and greatest directly from the ORARC Directors! Topics to be discussed include updates to ESTR, the University-wide electronic IRB submission platform; recent NIH policies impacting IRB review; review of some internal OHRA/IRB policies; and upcoming BIG changes to the Federal Regulations and how these may impact the review of your researcher! Bring your questions, and expect answers!

Friday, 9/28, 10-11am, Countway - Minot Room, Registration

For more information: afagan@hsph.harvard.edu

A great time was had by all at the Nutrition Department's annual picnic!



