

# NUTRI NEWS

## The Department of Nutrition

**November, 2022**

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## MPH-65 STUDENT MOMI AFELIN SERVES ON PANEL AT COP27!



**Momi Afelin** is a new MPH-65 student in Nutrition & Planetary Health, who was invited to present at a panel at the COP27 Summit this month. She is from Hawai'i and completed her undergraduate studies at Wesleyan University where she majored in Neuroscience and Behavior. After graduating, she received a Watson Fellowship and spent a year investigating how island communities in the Pacific engage in social entrepreneurship and social innovation to address issues that lie at the intersection of social and environmental concerns. Upon returning home, Momi applied what she had learned by working for local nonprofits where she specialized in increasing community engagement in environmental management, climate change resiliency, and traditional food systems. On top of that she also volunteered at a local family health clinic where most adult patients were being treated for nutrition-related NCDs. As a result, she became curious about how climate change will impact our food systems and how different communities are responding to such change.

The 2022 United Nations Climate Change Conference or Conference of the Parties of the UNFCCC, more commonly referred to as COP27, was the 27th United Nations Climate Change conference, held from 6 November until 20 November 2022 in Sharm El Sheikh, Egypt.

**NN:** *Momi, you are one of our new MPH students this fall, and already you have served on a food panel at the recent COP27 conference. That's awesome! Can you tell us more about this panel and what issues it tried to address?*

**MA:** Sure. The title of the Panel was "Food systems careers of the future: insights and aspirations from youth leaders". Participants were early-career trailblazers who were invited to share their work at the forefront of agricultural transformation and their visions for a new, fresh crop of food system careers. As a panelist, I shared my work in grassroots organic actions in Hawai'i revitalizing our traditional food systems, both marine and terrestrial.

**NN:** *What were some of the takeaways from this panel and how will some of the ideas discussed there be implemented?*

**MA:** Hearing the diverse paths my colleagues had taken to enter the field was an encouraging reminder of all the many ways that we can drive change in our own communities to create a more resilient food future.

**NN:** *How does this intersect with your own academic goals and current research?*

**MA:** As a nutrition and planetary health MPH student, this was a valuable experience to gain insight into the global conversations around the intersection of food, health, and climate change.

In my future research, I hope to study the use of traditional ecological knowledge in the management of marine food systems to improve climate change adaptation. At COP, I was exposed to conversations about this work on an international scale. I also broadened my exposure to the work of health professionals addressing climate change impacts. For example, I had the opportunity to attend panels titled *Indigenous Knowledge and Inclusive Ocean Governance: A Case Study from Vanuatu* and *Pathways to Climate & Health Justice: Towards Resilient and Just Health Systems*.



**NN:** *You must have had some amazing experiences while you were at COP27. Can you tell us about some of them?*

**MA:** The most memorable experience I had at COP was getting to know other young people passionate about their work addressing the climate crisis. For example, I met with Michelle Tigchelaar, who has

collaborated with **Dr Chris Golden** at HSPH, and got to learn about her work coordinating the Blue Food Assessment at Stanford.

**NN:** *How do you plan to use this COP27 experience going forth?*

**MA:** Reflecting on my time at COP, I am encouraged yet unsatisfied with the representation of health professionals discussing climate change impacts. I plan to continue encouraging conversations about the impacts of climate change on nutrition in my classes and among my peers at HSPH and seek out spaces where these conversations are being had.

**NN:** *Have you ever done anything like this before? Have you ever been to Egypt before?*

**MA:** This was my first time speaking at an event of this scale before and my first time to Egypt!

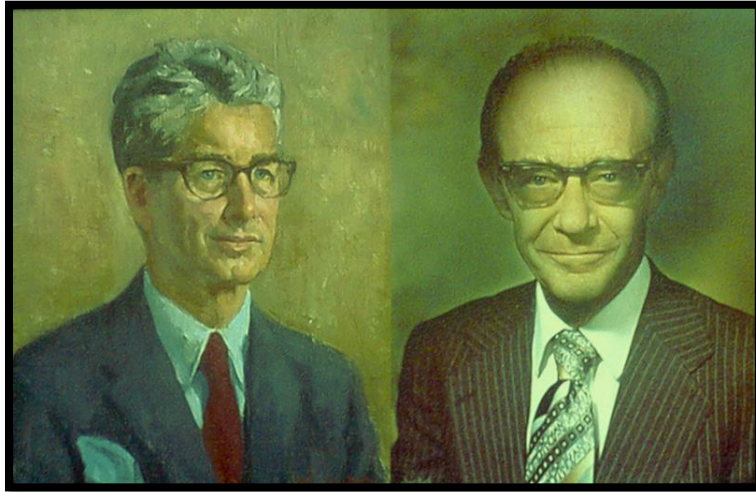
## DR ALICE H LICHTENSTEIN IS SPEAKER AT THIS YEAR'S 17<sup>TH</sup> ANNUAL STARE-HEGSTED LECTURE!



The Department of Nutrition held its 17<sup>th</sup> Annual Stare-Hegsted Lecture on November 14<sup>th</sup> this year. Although this year's event was a hybrid one due to lingering COVID concerns, it was good to see such a nice turnout! This annual Lecture is meant to honor Drs. Fredrick Stare and Mark Hegsted, who were the founders of our Department of Nutrition in 1942, when it became the first department of nutrition in any medical center or school of public health in the U.S. **Dr Alice H Lichtenstein** was this year's distinguished speaker. She is renowned for her groundbreaking research on the interplay between diet, especially fats and oils, and risk factors for cardiovascular disease in postmenopausal women and older men. Her laboratory was among the first to document the detrimental effects of partially hydrogenated (*trans*) fat on blood lipids. This work helped lay the foundation for the labeling and subsequent banning of partially hydrogenated fat by the U.S. Food and Drug Administration. Dr Lichtenstein is also an alumna of our department and her mentor while she was here was Dr Hegsted.

**Dr Frank Hu**, Fredrick J. Stare Professor of Nutrition and Epidemiology, Professor of Medicine, and Chair, Department of Nutrition, kicked off the event with a warm welcome to the audience and brief description of the lives of **Drs Fredrick Stare** and **Mark Hegsted** and why this event honors them every year. He then introduced Dr Lichtenstein.

As a bit of background, **Dr Fredrick Stare** became the first Chair of Nutrition in 1942 and held this post until he retired at the then mandatory age of 65 in 1975. Immediately after World War II, Dr Stare recognized that coronary heart disease was emerging as a major epidemic in the U.S. and focused the Department on understanding and preventing this disease. He established the Irish Brothers Study, which was one of the earliest studies of diet and physical activity. Even after stepping down as Chair, Dr Stare remained active and strongly supportive of the Department of Nutrition until his death in 2002.



**Dr Mark Hegsted** focused his efforts on understanding the effects of diet on lipid metabolism, and published a famous equation predicting serum cholesterol, summarizing many dozens of controlled feeding studies. He was later appointed Director of Human Nutrition at the U.S. Department of Agriculture and developed Dietary Goals for United States, the precursor to the Dietary Guidelines for Americans. Dr Hegsted continued to write, publish, and attend national meetings and this Lecture until his death in 2009 at age 95. A brand new portrait of Drs Stare and Hegsted now hangs in the Nutrition Conference Room. Be sure to stop to take a look at it the next time you are passing by Room #317!

Dr Alice H. Lichtenstein, DSc, is a senior scientist and director of the Cardiovascular Nutrition Laboratory at the HNRCA, as well as Stanley N. Gershoff Professor of Nutrition Science and Policy at the Friedman School, Tufts University. She also serves as the executive editor of the *Tufts University Health & Nutrition Letter* and is a Fellow of the American Society for Nutrition and the American Heart Association. Dr Lichtenstein is a member of numerous professional affiliations, including the Food and Nutrition Board for the National Academies of Science, Engineering and Medicine, and was Vice-chair of the 2015 Dietary Guidelines Advisory Committee for the USDA and U.S. Department of Health and Human Services and Vice-chair of the NHLBI Adult Treatment Panel. She was recently awarded the Alumni Award of Merit from the Harvard T.H. Chan School of Public Health.

Lichtenstein's talk titled **"The Intersection of Nutrition Science and Policy – Promoting Accurate Communication"** focused primarily on how the primary purpose of nutrition information is to promote food and beverage choices that will support growth, development, reproduction, maintenance and repair. However, she lamented the fact that according to the mean HEI Diet Quality Scores, we still have a long way to go. For example, the highest score for adults who are 65 and older was 63 (out of a possible 100). In addition, there has been very little change in these scores over time.





Dr Lichtenstein also discussed at length the difference in nutrition information vs nutrition dis- or mis-information, giving plenty of examples of each. She noted that some hazards of conflicting information include the promotion of misinformed choices, the undermining of consumer confidence in food choices, less healthy food choices, and a strong impact on the value of the food dollar.

She added that nutrition researchers also lose credibility when the public becomes confused about which are the best foods to eat, the best dietary patterns, and whether certain foods are all bad for you, or just partially so. Consumers are also given the wrong impression by misleading advertising, such as for gluten-free salted caramel cupcakes. She concluded her discussion by identifying possible solutions such as incorporating food and nutrition education at all levels and communicating new findings in a timely manner.

## NEWS IN THE DEPARTMENT

### HONORS AND AWARDS

**Dr Sophia Hua**, postdoctoral fellow in Nutrition, won the Ethan Sims Young Investigator Award from the Obesity Society at ObesityWeek in San Diego, California on November 4. Her award, based on an outstanding presentation of her work on how sugary drink taxes change individual's purchasing behaviors., was titled "Longitudinal Study on the Impact of the Philadelphia Beverage Tax on Prices and Purchasing."

The article by **Dr Josiemer Mattei** and her team, titled "Design and Implementation of PROSPECT: Puerto Rico Observational Study of Psychosocial, Environmental, and Chronic Disease Trends" has been selected as one of the 2021 Articles of the Year by the *American Journal of Epidemiology* and the Society for Epidemiologic Research. The *American Journal of Epidemiology* takes great pride in publishing papers that are leading the field of epidemiology and are at the cutting edge of epidemiologic science. In their

assessment, the articles of the year, which are chosen by the editors of the *Journal*, represent scholarship that is truly distinguished.

Several faculty members at Dept. of Nutrition including Drs. **Walter Willett, Meir Stampfer, Frank Hu** were ranked at the top by **Research.com** ranking of top scientists in the world. These rankings are based on based on publications and the H-index, which combines the number of publications and how often they have been cited.

## GRANTS

**Dr DeeDee Tobias**, Assistant Professor in the Department of Nutrition, has been awarded a new American Diabetes Association grant, titled "Novel epidemiologic tools to fast-track discovery and priority of dietary strategies for type 2 diabetes prevention". This research project will collaborate with **Dr Martin Lajous** and **Dr Dalia Stern** from the National Institute of Public Health in Mexico, and includes the NHS, NHS II, HPFS and Mexican Teachers Cohorts. The investigators are currently recruiting a postdoc with a strong background in causal inference and target trial methods and interest in nutritional epi.

## PRESENTATIONS

**Dr Aviva Musicus**, Postdoctoral Research Fellow, gave the following presentations:

1. **Musicus AA**, Gibson LA, Bellamy SL, Orr JA, Hammond D, Glanz K, Volpp KG, Schwartz MB, Bleakley A, Strasser AA, Roberto CA. (2022). A randomized virtual convenience store experiment of sugar-sweetened beverage text and graphic warnings. Oral presentation at the Obesity Society Annual Conference. San Diego, CA.
2. **Musicus AA**, Roberto CA, Moran AJ, Sorscher S, Greenthal E, Rimm EB. (2022). Effect of front-of-package information, fruit imagery, and high-added sugar warning labels on parent beverage choices for children: A randomized clinical trial. Oral presentation at the Obesity Society Annual Conference. San Diego, CA.
3. **Musicus AA**, Long MW, Rohrer B, Barrett J, Ward Z, Craddock AL, Bleich SN, Gortmaker SL. (2022). Improving health equity by removing SNAP eligibility of sugar-sweetened beverage purchases. Oral presentation at the American Public Health Association Annual Meeting. Boston, MA.
4. Falbe J, **Musicus AA (presenter)**, Sigala DM, Roberto CA, Solar S, Lemmon B, Sorscher S, Nara D, Hall MG. (2022). Online randomized controlled trial of icon added-sugar warning labels for restaurant menus. Oral presentation at the American Public Health Association Annual Meeting. Boston, MA.
5. **Musicus AA\***, Wang DD\*, Eshel G, Janiszewski M, Blondin SA, Walter WC, Stampfer MJ. (2022). Health and environmental impacts of plant-rich dietary patterns: A U.S. prospective cohort study. Poster presentation at the Planetary Health Alliance Annual Meeting. Boston, MA.

\*co-first authors

**Dr Anna Grummon**, Research Scientist, also made the following presentations at ObesityWeek:

1. Grummon, A.H., Musicus, A.A., Moran, A.J., Salvia, M.G., & Rimm, E.B. (2022). Impact of positive and negative front-of-package food labels in a randomized experiment. Oral presentation at Obesity Week 2022, November 3, 2022, San Diego, CA.
2. Grummon, A.H., Petimar, J., Simon, D., & Block, J.P. (2022). Nutritional composition and trends in purchases of supermarket prepared foods. Oral presentation at Obesity Week 2022, November 3, 2022, San Diego, CA.

**Dr Josiemer Mattei**, Donald and Sue Pritzker Associate Professor of Nutrition, was also invited to speak at ObesityWeek about school meals programs during COVID. Her talk was titled "School Meal Programs as a Critical Nutrition Safety Net: Lessons from COVID-19"; it was part of a session called *Lessons Learned from Changes to Food Assistance Programs During the Pandemic*.

## PUBLICATIONS

**Matthias Henn**, visiting graduate student, has published the following paper:

Henn M, Martin-Gorgojo V, Martin-Moreno JM. Vitamin D in Cancer Prevention: Gaps in Current Knowledge and Room for Hope. *Nutrients*. 2022 Oct 27;14(21):4512. doi: 10.3390/nu14214512. PMID: 36364774; PMCID: PMC9657468.

This paper critically reviewed the standards of interpretation of the available study results and proposed criteria that could allow us to reach sound conclusions in this field. It advocates for options tailored to individual vitamin D needs, combined with a comprehensive intervention that favors prevention through a healthy environment and healthy behaviors.

*The full article can be found on:* <https://www.mdpi.com/2072-6643/14/21/4512>

## NEW FACULTY APPOINTMENTS

**Dr Marianna Cortese** has been promoted to Senior Research Scientist.

## NEW FACES IN THE NUTRITION DEPARTMENT



**Jade Conway**  
**Communications Manager**

Jade Conway (she/her/hers) is a new Communications Manager in the Department of Nutrition, supporting the forthcoming Center for Mindfulness. She previously worked in public health and communication roles for several nonprofit organizations including the CDC Foundation, the Gateway Region YMCA, the Oxygen Project: Yoga for Youth, and Empower Through Health. Jade will provide strategic communications support for all aspects of the Center and support the Department of Nutrition's websites and programs.

The intersection of public health, mindfulness, and art is where Jade finds great joy. Jade is an artist, yoga teacher, veteran, and public health advocate. She graduated with her Master's in Public Health from Saint Louis University in 2020 with concentrations in Maternal and Child Health and Global Health. Jade looks forward to creating meaningful connections within the Harvard T.H. Chan School of Public Health and the broader Harvard community.



**Binkai Liu**  
**Research Assistant**

Hi! I'm Binkai and I'm excited to have joined the department as a research assistant since this summer. I mainly work with **Dr Qi Sun** on projects on how lifestyles and diet relate to diabetes and obesity outcomes. I recently graduated with an MS in the Epidemiology program at HSPH, and I got my BS in Biochemistry and a Certificate in Mathematics from the University of Wisconsin-Madison.

I grew up in Changsha, China, but I've been moving around the world after high school. I love spicy food a lot and I enjoy baking as a way of finding my inner peace. During my spare time, you'll find me on badminton courts, exploring local restaurants, and walking JoJo in JP.

## MORE NEWS IN THE DEPARTMENT

### Study finds that healthy plant-based diets are better for the environment than less healthy plant-based diets



Photo from Harvard Health

According to a new study led by **Dr Aviva Musicus**, Postdoctoral Research Fellow, and colleagues healthier plant-based dietary patterns were associated with better environmental health, while less healthy plant-based dietary patterns, which are higher in foods like refined grains and sugar-sweetened beverages, required more cropland and fertilizer. The authors' findings also showed that red and processed meat had the highest environmental impact out of all food groups in participants' diets, producing the greatest share of greenhouse gas emissions and requiring the most irrigation water, cropland, and fertilizer.

Musicus explains the discrepancy by stating that "The differences between plant-based diets were surprising because they're often portrayed as universally healthy and good for the environment, but it's



more nuanced than that. To be clear, we're not asserting that less healthy plant-based diets are worse for the environment than animal-based diets. However, our findings show that plant-based diets can have different health and environmental impacts."

Using data from the Nurses' Health Study II, the researchers analyzed the food intakes of more than 65,000 qualifying participants, and examined their diets' associations with health outcomes, including relative risks of CVD, and with environmental impacts. Findings indicate that those participants who consumed healthy plant-based diets had lower cardiovascular disease risk, and those diets had lower greenhouse gas emissions and use of cropland, irrigation water, and nitrogenous fertilizer than diets that were higher in unhealthy plant-based and animal-based foods. Further, those participants who ate unhealthy plant-based diets experienced a higher risk of cardiovascular disease, and their diets required more cropland and fertilizer than diets that were higher in healthy plant-based and animal foods.

**Dr Daniel Wang**, assistant professor in the Department of Nutrition and co-author of the study, adds "Because human health ultimately depends upon planetary health, future U.S. dietary guidelines should include nuanced consideration of environmental sustainability and recognize that not all plant-based diets confer the same health and environmental benefits".

"Health and environmental impacts of plant-rich dietary patterns: A U.S. prospective cohort study," Aviva A. Musicus, Dong D. Wang, Marie Janiszewski, Gidon Eshel, Stacy A. Blondin, Walter Willett, Meir J. Stampfer, The Lancet Planetary Health, online November 2022, doi:10.1016/S2542-5196(22)00243-1.

**From:** <https://www.hsph.harvard.edu/news/press-releases/healthy-plant-based-diets-better-for-the-environment-than-less-healthy-plant-based-diets/>

## UPDATES FROM THE DEPARTMENT'S DIB COMMITTEE

**By Bristian Justice**

We hope all are enjoying the fall foliage and new seminars offered through the Diversity, Inclusion, and Belonging office. The sub-committees are underway and have been setting a foundation for future efforts along with coordinating across the department. Engagement opportunities are being offered, and we are very excited to host some events in the near future. Please be sure to check for invitations, and/or future announcements related to NUT-DIB. We do seek feedback and suggestions related to NUT-DIB initiatives. Please do not hesitate to reach out!

## 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, planetary nutrition, public health 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, most of the seminars have been presented via Zoom since March of 2020. Beginning this fall, our seminars will be in more of a hybrid mix, with some in-person and others still virtual. The in-person seminars will also be on Zoom for those unable to attend. During the fall semester, live seminars will be held in FXB G-13. Live spring semesters will be in Kresge 502, as they were in past years. A zoom link for viewing will be available one week prior to each seminar.

**Our December speakers will be:**

**Dec 5** **Dr Zachary Ward**, Research Scientist, Center for Health Decision Science, HSPH – “The utility of BMI for estimating population health outcomes” – (Hybrid)

**Dec 12** **Dr Antonio Paoli**, Professor of Exercise and Sport Sciences; Head, Nutrition and Exercise Physiology Laboratory, Department of Biomedical Sciences; Dean of Undergraduate Program in Sport and Exercise Science; Dean of Graduate Program in Health and Exercise, School of Medicine, University of Padova – “Fasting and exercise for health and performance: an impossible marriage?” (Hybrid)

*This will conclude our Fall Monday Nutrition Seminar Series. There will be no seminars during the Winter Recess. Our Spring Monday Nutrition Seminar Series will begin on January 23, 2023.*

## NUTRITION SOURCE UPDATES

### Environmental impacts of different plant-based diets

A new study finds healthier plant-based dietary patterns were associated with better environmental health, while less healthy plant-based dietary patterns (higher in foods like refined grains and sugar-sweetened beverages) required more cropland and fertilizer. Learn more: <https://www.hsph.harvard.edu/news/press-releases/healthy-plant-based-diets-better-for-the-environment-than-less-healthy-plant-based-diets/>

### Holiday cooking

Hearty and delicious dishes that feature a variety of vegetables, so you can wow your guests with a display of vibrant colors, textures, and flavors. Try them out: [https://www.hsph.harvard.edu/nutritionsource/healthy-holiday-cooking\\_recipes/](https://www.hsph.harvard.edu/nutritionsource/healthy-holiday-cooking_recipes/)

### Nutrient feature: Vitamin D

New research looks at the relationship between vitamin D deficiency and risk of premature death. Learn more about this vitamin: <https://www.hsph.harvard.edu/nutritionsource/vitamin-d/>

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

### The Cretan Lifestyle Conference: Mediterranean Tradition & Modern Applications at Grecotel in Rethymno, Crete, Greece took place November 7-11, 2022.



Congratulations to the winners of the Young Investigators & Professionals presentation competition: 1st: Dr. Clemens Wittenbecher, 2nd: Ms. Ioanna Yiannakou, and 3rd: Dr. Maria Soledad Hershey, pictured with the distinguished judges Dr. Antonia Trichopoulou, Dr. Nikolaos Scarmeas, Dr. Miguel Ángel Martínez González, and Dr. Mercedes Sotos Prieto, at the Cretan Lifestyle Conference organized by Dr. Stefanos Kales.



Dr. Antonia Trichopoulou with Young Investigators & Professionals competition winner Dr. Clemens Wittenbecher.

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# DEPARTMENT OF NUTRITION ANNUAL HOLIDAY PARTY

DECEMBER 14, 2022  
4:30 PM - 7:00 PM

All Department's faculty, students, staff,  
fellows, and families are welcome!