

NUTRI NEWS

The Department of Nutrition

November 2023

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Inaugural Women's Health Conference 2023 Launched in Singapore



The inaugural [Women's Health Conference 2023](#) unfolded at Fairmont Singapore from November 9th to 11th. Jointly organized by the [Global Centre for Asian Women's Health](#) (GLOW) in the National University of Singapore (NUS)'s Yong Loo Lin School of Medicine, and the Harvard TH Chan School of Public Health, the event brought together over 40 distinguished international and local speakers and more than 200 delegates to discuss women's health issues centred around the theme of "Promoting Women's Health and Healthy Longevity: from Laboratory to Kitchen".

The three-day conference saw the official launching of GLOW, with highlights of GLOW's achievements since its establishment in 2022 and the Founding Director, **Professor Cuilin Zhang** provided a glimpse of the centre's visions and future plans for charting paths to promote women's health. Two major focal points of the centre, 'global' and 'translational' research endeavors, were highlighted by Professor Zhang. She is currently an Adjunct Professor of Nutrition and was a former postdoctoral fellow at Dept. of Nutrition,

HSPH. The event also featured lectures by esteemed Harvard senior faculties, including **Professor Michelle A. Williams**, **Professor Walter C. Willett**, **Professor Frank B. Hu**, and **Professor Marcia C. de Castro**. These lectures focused on addressing global landscapes and identifying gaps in women's health. Many other faculty members from the Department of Nutrition were also present to share their work, including **Professor Jorge Chavarro**, **Associate Professor Qi Sun** and **Dr Lilian Cheung**.

Sessional talks covered many themes, including nutrition, fertility, cardiometabolic health, cancer, intergenerational health, cohort studies, lifestyle intervention efficacy, and translational research efforts. Principal Investigators from prominent studies such as the Danish National Birth Cohort, PREDIMED, Singapore Chinese Health Study, and Growing Up in Singapore Toward healthy Outcomes ([GUSTO cohort](#)), also presented findings relevant to women's health over the life-course. **Mr Greg Drescher**, Senior Advisor at the Culinary Institute of America, shared how professional kitchens play a role in women's health, and this was followed by **Chef Mai Pham's** (owner of Star Ginger Restaurants) live cooking demonstration of a healthy Asian dish. The conference closed with a panel discussion on the challenges and opportunities for promoting a healthy diet. The next Women's Health Conference will take place in Singapore, on the 24-25th October 2024. Please mark your calendar for the exciting event!



NEWS IN THE DEPARTMENT

HONORS & AWARDS

Jorge Chavarro, Professor of Nutrition and Epidemiology, has begun serving as Chairperson for the Pregnancy and Neonatology Study Section for NIH. The Pregnancy and Neonatology Study Section [PN] reviews applications related to the physiology of pregnancy and placental development, parturition, clinical obstetrics, maternal/ fetal medicine, and fetal/neonatal development utilizing molecular/genetic, cellular, whole-organ/animal model/human subject, and/or biochemical methodologies. Emphasis is on basic and/or clinical models to understand pregnancy progression and its disorders.

PUBLICATIONS

A Primer on Systematic Review and Meta-analysis in Diabetes Research

Well-conducted systematic reviews and meta-analyses (SRMAs) are an important and robust methodology to inform research, clinical practice and policy. However, many aspects of the SRMA process are still subject to error, subjectivity and bias which has led to many reviews of poor quality and misleading conclusions. In their article published October 27, 2023 in [Diabetes Care](#), **Deirdre K. Tobias**, Stefania Papatheodorou, Jennifer M. Yamamoto and **Frank B. Hu** provide up-to-date knowledge and a comprehensive understanding of the strengths and limitations of SRMAs, which they gained after

conducting a systematic review of diabetes-related SRMAs. They first provide an overview of the SRMA process, describing best practices, mitigation approaches, and recent developments; they then outline several strategies that can be used to enhance SRMA quality and present key questions that authors, editors, and readers should consider in preparing or critically reviewing SRMAs.

Link to the article: <https://diabetesjournals.org/care/article/46/11/1882/153754/A-Primer-on-Systematic-Review-and-Meta-analysis-in>

Cindy Leung, Assistant Professor of Public Health Nutrition, and colleagues published an article in *National Geographic*, titled “Ultra-processed food isn't just bad for your health—it messes with your mind”. This *National Geographic* story provides an overview of ultra-processed foods, how these foods can be addictive, the extent to which Americans consume them, and personal tips for reducing their consumption. The story features quotes from **Drs Cindy Leung, Ashley Gearhardt** (University of Michigan), and **Melissa Lane** (Deakin School of Medicine).

To read the article: <https://www.nationalgeographic.com/premium/article/ultra-processed-foods-damage-brain-depression-anxiety-cognitive-decline>

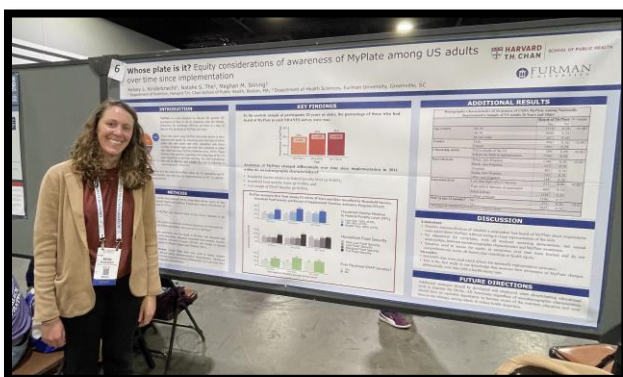
PRESENTATIONS

Doctoral student **Nour Hammad**, working with **Drs Cindy Leung** and **Walter Willett**, delivered an oral presentation at the American Public Health Association (APHA) Annual Meeting in Atlanta, GA, about “Food insecurity & ideal cardiovascular health (CVH) among U.S. adolescents”. This study leveraged NHANES data to explore the association between household food security & adolescent CVH using the American Heart Association’s Life’s Essential 8 metric. The study found that food insecurity is an important correlate of adolescent CVH, and found disparities by food insecurity status in diet quality and nicotine exposure, as components of the LE8. Leung and Willett were co-authors on this paper; Hammad’s primary advisors are **Drs Deirdre Tobias** and **Walter Willett**.



Kelsey Kinderknecht, doctoral student working with **Dr Erica Kenney**, delivered a poster presentation at the American Public Health Association (APHA) Annual Meeting in Atlanta, GA. Kelsey presented findings from a study entitled “Whose plate is it? Equity considerations of awareness of MyPlate among US adults over time since implementation” that leveraged NHANES data to understand who has heard of MyPlate and whether awareness varied by sociodemographic characteristics. The study results highlight opportunities to advance awareness of this nutrition resource using tools that reach the general population more equitably.

Matt Lee, doctoral candidate working with **Dr Erica Kenney**, received the Food and Nutrition Section Student Award at the American Public Health Association (APHA) Annual Meeting in Atlanta, GA. His abstract, "Impact of unconditional cash transfers on diet during the COVID-19 pandemic: A randomized lottery experiment" scored among the top of all student submissions in the section. Matt delivered an oral presentation on the study findings which included that these programs alleviated hunger and contributed to increased dietary intake of certain foods. Matt delivered a second oral presentation "Changes in advertising and store stocking practices among small, independent beverage retailers following a sweetened beverage excise tax in Philadelphia: A difference-in-differences study" which found that marketing of sugary beverages increased significantly following the Philadelphia SSB tax, especially in low-income neighborhoods.



NEW RESEARCH SCIENTIST APPOINTMENTS

Dr Lorena Pacheco has been appointed Research Scientist in the Department of Nutrition.

RESEARCH NEWS

Want to trim your waistline? Eat more non-starchy vegetables

Although indulging in cookies and cakes, soda, and white bread can accelerate weight gain in middle age, another culprit can now be added to the list: starchy vegetables.

According to a new study, researchers found that swapping whole grains, fruits, and non-starchy vegetables for refined grains, foods high in added sugar, and starchy vegetables — such as potatoes, peas, and corn — can slow weight gain as we age.

First author **Yi Wan**, Postdoctoral Research Fellow, states that "Starch-rich foods tend to digest faster than fiber-rich foods, causing a rapid increase in blood-sugar levels. This quick increase can trigger metabolic processes that convert these sugars into stored body fat".

Wan added that favoring whole grains deters weight gain by slowing digestion and blood sugar spikes. "This can help mitigate metabolic processes that promote fat storage. In addition, whole-grain foods are

typically rich in fiber, a nutrient widely recognized for its beneficial effects on weight management. This is the same reason that low-carb diets — often promoted as beneficial to weight loss — don't work".

Wan continues, "Carbohydrates are the body's primary energy source. More importantly, maintaining a low-carb diet can also limit the consumption of beneficial nutrients like fiber, vitamins, minerals, and many bioactive compounds found in carbohydrate-rich foods like whole grains, fruits, and vegetables. Our findings raise concern about the current U.S. Dietary Guideline recommendation to increase consumption of all types of vegetables, including starchy vegetables."

The research team examined the diets of nearly 137,000 men and women under the age of 65. They used data from more than 25 years through the Nurses' Health Study I and II and the Health Professionals Follow-Up Study.

However, their study contradicts U.S. Dietary Guidelines. According to Wan, "Our findings for starchy vegetables raise concern about the current U.S. Dietary Guideline recommendation to increase consumption of all types of vegetables, including starchy vegetables. We recommend a heightened focus on increasing the intake of non-starchy vegetables." As to whether any amount of refined carbs, starch, or sugar are appropriate in a healthy diet, Wan said there is no specific threshold that leads to weight gain. "We recommend minimizing their consumption, particularly of added sugar," she said.

Wan Y, Tobias DK, Dennis KK, et al. Association between changes in carbohydrate intake and long term weight changes: prospective cohort study. *BMJ* 2023; **382**: e073939.

From: <https://news.harvard.edu/gazette/story/2023/11/study-links-starchy-vegetables-like-potatoes-with-middle-age-weight-gain/>

New Study Highlights the Role of Diet in Esophageal Cancer Risks in China

A recent study led by **Jingwen Dong**, a current SM2 Nutritional Epidemiology track student in the Epidemiology Department at the Harvard Chan School, and published in *Nutrients* 2023, has significantly advanced our understanding of the relationship between the inflammatory potential of diet and the risk of esophageal diseases. The research, titled "Associations of Dietary Inflammatory Potential with Esophageal Precancerous Lesions and Esophageal Squamous-Cell Cancer: A Cross-Sectional Study," delves into how dietary choices impact esophageal precancerous lesions (EPLs) and esophageal squamous-cell cancer (ESCC). The corresponding author of this paper is **Dr Jiali Zheng**, Associate Professor at Shanghai Jiao Tong University School of Medicine, whose research focuses on diet pattern and digestive cancer risk.

There is an urgent need for research on ESCC precancerous lesions. **Dr Xiaoyu Pan**, an MPH-65 Nutrition student, aspiring physician-scientist, and co-author of this research, underscores the urgency for more research. "While ESCC typically has poor survival rates, its precancerous lesions have a much better prognosis, with a 90% five-year survival rate. However, over 90% of ESCC patients are diagnosed at advanced stages. Identifying modifiable risk factors for these conditions is crucial. However, there is limited evidence on the dietary risk factors of Esophageal Precancerous Lesions," Dr Pan emphasizes.

Jingwen Dong, the study's lead author, collaborated with colleagues from the Cancer Prevention and Treatment Office, Yanting Cancer Hospital, Mianyang, and Shanghai Jiao Tong University School of Medicine, to establish an analytical cohort and analyze cross-sectional baseline data in high-risk ESCC areas. "Since ESCC is common in certain regions of China, we focused our efforts on these areas, where ESCC rates are among the world's highest. Our study involved 3967 participants from the National Cohort of Esophageal Cancer (NCEC) in China," Dong said. "To accurately measure dietary exposure, our team employed a tailored assessment tool. We used a quantitative food frequency questionnaire (FFQ) adapted from a standardized National Cancer Institute questionnaire but modified to reflect the local foods and dietary habits of rural residents in southwest China," Dong explains. This approach ensured that the study's findings accurately reflected the dietary patterns in regions with high ESCC incidence.

"The Dietary Inflammatory Index (DII) is a scoring system designed to quantify the inflammatory potential of an individual's diet," Dong explains, "Developed through an extensive review and meta-analysis of global research linking diet with inflammation, the DII assigns scores to various foods and nutrients based on their inflammatory or anti-inflammatory properties. Foods that are known to increase levels of pro-inflammatory markers, like salted or pickled vegetables, receive higher DII scores, while those that have anti-inflammatory effects such as leafy green vegetables and fiber contribute to lower scores." Reflecting on the preventative implications of the study, Dong states, "Our findings revealed a statistically significant positive association between higher DII scores and overall EPLs, indicating that diets with greater inflammatory potential may increase the risk of esophageal diseases. Our research suggests that consuming anti-inflammatory foods may be beneficial in preventing EPLs and potentially ESCC."

Jingwen Dong is an SM2 Epidemiology Nutrition Epidemiology track student. **Dr Xiaoyu Pan** is an MPH-65 Nutrition student and aspiring physician-scientist. **Sheng-Yin Chen** is an MPH QM alumnus. **Dr Stephanie Smith-Warner** is a Senior Lecturer on Nutritional Epidemiology in the Nutrition and Epidemiology departments and serves as Jingwen's advisor.

[DOI and Reference Information]

Dong, J., Gao, M., Li, L., Pan, X., Chen, S. Y., Li, J., Smith-Warner, S. A., Li, X., Wang, H., & Zheng, J. (2023). Associations of Dietary Inflammatory Potential with Esophageal Precancerous Lesions and Esophageal Squamous-Cell Cancer: A Cross-Sectional Study. *Nutrients*, 15(18), 4078.

<https://doi.org/10.3390/nu15184078>

NEW FACES IN THE NUTRITION DEPARTMENT

The following people have recently joined the Nutrition Department. Please take a minute the next time you see them in the hallway to say "hello" to them and welcome them to the department!

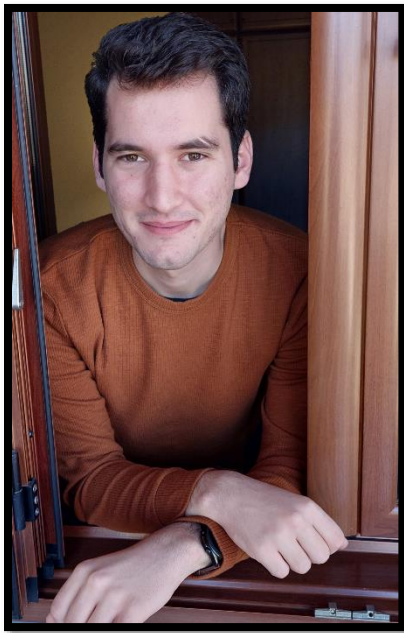


Pengfei Xia **Visiting Graduate Student**

My name is Pengfei Xia, and I was born in Jingzhou, beside the Yangtze river in Hubei Province. I am a Ph.D. candidate from Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China, and am currently a visiting graduate student in the Nutrition Department under the guidance of **Professor Qi Sun**.

I also received my Bachelor's degree of Medicine in 2014 in Tongji Medical College. My research interests focus on the relationship between dietary factors, plasma metabolomics, the gut microbiome, and cardiometabolic health.

On weekends I really enjoy cooking classic Chinese cuisines and sharing these dishes with my friends.



Dimitrios Diamantis
Visiting Scientist

Greetings, everyone! My name is **Dimitrios**, and I come from Greece. Currently, I am a Visiting Scientist in the Nutrition Department. My primary focus revolves around ways to facilitate meaningful dietary changes at the public level, particularly addressing issues such as food insecurity and obesity in school-aged children. I hold a bachelor's degree in Nutrition and Dietetics from Harokopio University in Athens, Greece, and a master's degree in Public Health from the University of Bristol, UK. Currently, I am working on evaluating the long-term effectiveness of universal free school meal programs in alleviating food insecurity, promoting healthier dietary habits, and improving quality of life. My research is conducted under the guidance of **Professors Cindy Leung** and **Frank Hu**. I hope that this work will underscore the importance and necessity of universal free school meal provision in disadvantaged populations.

Despite my short stay here, I'm eager to connect with everyone. Outside of my academic endeavors, I enjoy immersing myself in different cultures through social interactions and participating in sports, even if

I'm not particularly skilled at them.



Yahya Mahamat-Saleh
Visiting Scientist

My name is Yahya Mahamat-Saleh, and I have been a visiting scientist in the Department of Nutrition from October 2023. I will be working under the supervision of **Professor Heather Eliassen** on the metabolic profile of healthy lifestyle patterns and breast cancer risk in the Nurses' Health Studies. I am working as a postdoc scientist at the IARC-WHO, under the supervision of **Dr Laure Dossus** on a project entitled "Triple-negative breast cancer: improving prevention and survival by the identification of new metabolic pathways" in the EPIC cohort, a project for which I am funded by the Fondation ARC. I am also working on a project which aims to explore untargeted metabolomics in relation to breast cancer in Black African women.

I am particularly interested in the influence of diet on cancer risk and survival, as well as in developing my skills in analyzing biological and -omics data. Born and raised in Chad, I moved to France for my studies. I earned a Master's degree in Nutrition and Human Health from the University of Bordeaux in 2016, followed by a certificate of training in Nutrition epidemiology obtained at Imperial College of London and a Master's in Public Health from the University of Paris 13. I completed my PhD in cancer and nutritional epidemiology at the University of Paris Saclay, focusing on the associations between nutritional factors and skin cancer risks in the French E3N and European EPIC cohorts. During my PhD studies, I undertook a research visit in Australia at the Population Health Department of QIMR Berghofer Medical Research Institute (Adele Green's lab) and in Germany at the German Diabetes Center, where I acquired new methodological tools.

I'm leading an NGO called "Solidarité Nord-Sud," which aims to assist people living in the countryside of Chad, particularly those residing in the desert areas of Chad by implementing eco-friendly water wells, healthcare centers, and schools. The ultimate goal is to help them improve their quality of life within their own communities. I look forward to collaborating with my colleagues in the department.



Yan Gong (龚岩)

Postdoctoral Research Fellow

Greetings, everyone! I'm Yan, originally from Liaoning Province in the Northeast of China. I obtained a B.Sc. in Mathematics from Xi'an Jiaotong University (Xi'an, China), an M.Sc. and Ph.D. in Statistics from King Abdullah University of Science and Technology (KAUST, Saudi Arabia) in 2023, under the supervision of Professor Raphael Huser. Before joining HSPH, I worked as a Postdoctoral Researcher at Imperial College London (London, UK), advised by Professor Almut Veraart and Professor Axel Gandy.

I am excited to embark on my new position at HSPH, where my focus will be on Bayesian Multivariate 3D Spatial Modeling for Microbiome Image Analysis. I'll be working under the guidance of **Professors Kyu Ha Lee, Jacqueline Starr, and Brent Coull**. In my free time, I take pleasure in engaging in activities like tennis, dancing, and cycling.

Weekly Mindfulness Sessions

DAY	DATE	TIME	LOCATION
THURSDAY	SEP-7	1 - 1:50 PM	NUTRITION LIBRARY, ROOM 317
THURSDAY	SEP-14	1 - 1:50 PM	NUTRITION LIBRARY, ROOM 317
THURSDAY	SEP-21	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	SEP-28	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	OCT-5	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	OCT-12	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	OCT-19	1 - 1:50 PM	NUTRITION LIBRARY, ROOM 317
THURSDAY	OCT-26	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	NOV-2	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	NOV-9	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	NOV-16	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	NOV-30	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	DEC-7	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	DEC-14	1 - 1:50 PM	KRESGE ROOM 110
THURSDAY	DEC-21	1 - 1:50 PM	KRESGE ROOM 110

Questions? Email us at mindfulpublichealth@hsph.harvard.edu

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. Since Covid-19 our seminars have been a zoom and hybrid mix. Most of this year's talks will be in-person, although some will still be virtual. The in-person seminars will also be on Zoom for those unable to attend. Live seminars will be held in Kresge 502. Zoom link for viewing will be available one week prior to each seminar.

Our Monday Nutrition Seminar speaker for December will be:

Dec 4 **Parul Christian, DrPH, MSc** – Director of the Program in Human Nutrition and Professor at Johns Hopkins Bloomberg School of Public Health – “Fortified balanced energy and protein (BEP++) supplementation for enhancing pregnancy and birth outcomes – an unfinished agenda” - NGHP

Dec 11 **Dr Stephanie Smith-Warner**, Senior Lecturer on Nutritional Epidemiology; and
Dr Fenglei Wang, Research Fellow, Department of Nutrition – TBD

This will conclude our Fall 2023 Monday Nutrition/Global Health Seminar Series. Our Spring 2024 Series will begin on January 22, 2024

Integrating Nutrition into Clinical Medicine: The Role of Health Professionals as Change Agents

Jan. 8-12, 2024 • M-Th 1-3PM, Fr 1-4PM • In-person at HSPH • 1.25 Credits (P/F)

IN THIS COURSE, WE WILL:

- ✓ Examine the key evidence that links diet to both personal and planetary health.
- ✓ Review the current status of nutrition education and practice in the United States.
- ✓ Explore barriers and solutions to greater incorporation of nutrition in medical practice.



More info and reviews
on [my.Harvard](https://my.harvard.edu)



**NUT 280
Registration
begins
Nov. 9 on
[my.Harvard](https://my.harvard.edu)**



DEPARTMENT OF NUTRITION

Annual Holiday Party

December 14, 2023
4:30 PM - 7:00 PM

Sebastian's Café | First Floor of Kresge

All department faculty, student, staff,
fellows, and families are welcome!



Technology-driven solutions to advance Precision Medicine

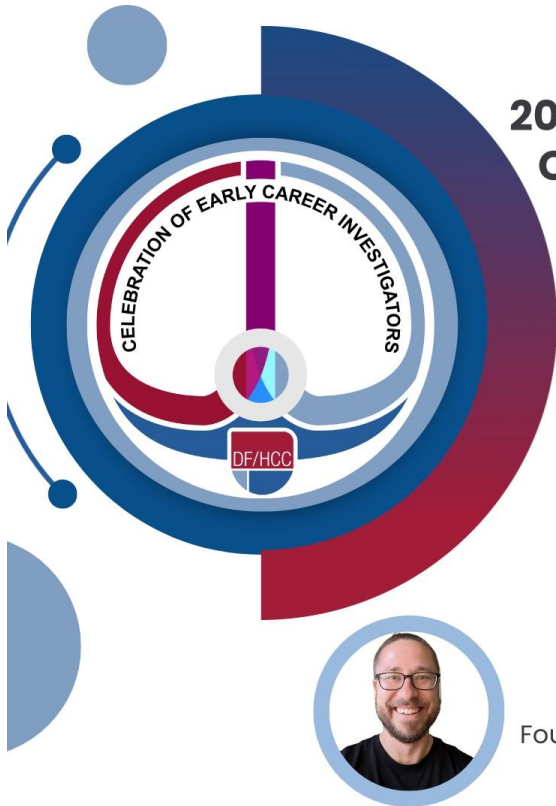
Welcome to **Precision Nutrition Forum 2024!**

Precision Nutrition Forum 2024 will bring together researchers at all career levels interested in nutrition research and related disciplines to discuss the latest science in precision nutrition.

The conference takes place in the Maersk Tower at the University of Copenhagen on **April 16-17, 2024.**

A limited number of **travel awards** are available for early career scientists, PhD students, or postdocs.

For program and registration visit: <https://cbmr.ku.dk/events/pnf-2024/>



CALL FOR ABSTRACTS

2024 Dana-Farber/Harvard Cancer Center Celebration of Early Career Investigators

January 31, 2024 from 1:00–5:00PM

In-Person at Dana Farber Cancer Institute

Do you work in population science, including epidemiology, biostatistics, outcomes, diversity, cancer care delivery research, and early detection? We invite students, postdocs, residents, clinical fellows, and early career faculty to submit abstracts for consideration as a short talk or as part of the PATHFINDER sponsored poster presentation.

Submit your abstract by December 31

<https://bit.ly/ECIS2024Abstract>



2024 KEYNOTE SPEAKER

Jeff Leek, PhD, Chief Data Officer, Vice President, and J Orin Edson Foundation Chair of Biostatistics at the Fred Hutchinson Cancer Center

Registration for the public now open at <https://bit.ly/ECIS2024>