

## OFFICIAL NEWSLETTER OF THE NORCH RESEARCH BASE

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## 23rd Annual NORCH Symposium Announcement

Save the date for our **Annual NORCH Symposium**:

The Neurobiology of Eating Behavior in Obesity:

Mechanisms and Therapeutic Targets

Wednesday, June 8, 2022

Virtual

Please be sure to <u>complete the 2022 Symposium Interest Form</u> to be contacted for early registration. <u>Click here to mark your calendar.</u>

# NORCH Annual Pilot & Feasibility Symposium (Now Virtual)

Date: 11/18, 1:30-3:30pm. Now being held virtually! <u>Click here to register now.</u> For more information, <u>click here.</u>

Featured Keynote Speaker and Pilot & Feasibility Awardee Presenters:



Alessio Fasano, MD Keynote Speaker The Healing Power of Nutrition



Laura Dichtel, MD Molecular Mechanisms of Growth Hormone Action in Nonalcoholic Fatty Liver Disease



Margaret Stefater-Richards, MD, PhD Intestinal Epithelial Organoids and Roux Limb Remodeling after Gastric Bypass Surgery



The Placenta and Pro-Resolving Superfamily of Mediators: New Insights into Intergenerational Obesity Marc Wein, MD, PhD The Role of Salt inducible Kinases in Obesity-Associated Systemic Viral Pathogenesis

Carmen Monthé-Drèze,

MD



Jacqueline Lane, PhD
The Circadian Clock as a
Treatment for Obesity:
Developing a Meaningful
Measure of Circadian
Disruption

# Pennington Nutrition and Obesity Training and Symposium

Nutrition/Obesity Research Methods Training Course (April 26-28):

Two members from each NORC will be selected to attend this course in Baton Rouge. Registration, travel, course costs, lodging and meal per diem will be covered. Proof of COVID-19 vaccination is required.

# <u>Click here to view the Training Course Itinerary.</u>

Pennington Symposium, "Biological and Behavioral Mechanisms of Weight Loss Maintenance" (April 24-26):

One NORCH member will be invited to attend.

<u>Click here to view the Symposium Agenda.</u>

Investigators interested in attending the Training and/or Symposium should write to us by December 3.

## **Recent Publications**

# Recent Highlights from NORCH Investigators

Kileel EM, Dickins KA, Zheng H, Fitch KV, **Looby SE.** The Association of Distinct Social Determinants of Health with Added Sweetener Knowledge and Consumption in a U.S. Sample of People Living with HIV. AIDS Behav. 2021 Nov 3. Online ahead of print. PMID: 34731406

Wang IS, Kamath Τ. Mazur CM, Mirzamohammadi F, Rotter D, Hojo H, Castro CD, Tokavanich N, Patel R, Govea N, Enishi T, Wu Y, da Silva Martins J, Bruce M, Brooks DJ, Bouxsein ML, Tokarz D, Lin CP, Abdul A, Macosko EZ, Fiscaletti M, Munns CF, Ryder P, Kost-Alimova M, Byrne P, Cimini B, Fujiwara M, Kronenberg HM, Wein MN. Control of osteocyte dendrite formation by Sp7 and its target gene osteocrin. Nat Commun. 2021 Nov 1;12(1):6271. PMID: 34725346

Carson TL, Cardel MI, **Stanley TL, Grinspoon S,** Hill JO, Ard J, Mayer-Davis E, **Stanford FC.** Racial and ethnic representation among a sample of nutrition- and obesity-focused professional organizations in the United States. Am J Clin Nutr. 2021 Oct 27:nqab284. Online ahead of print. PMID: 34718383

Bromage S, Batis C, Bhupathiraju SN, **Fawzi WW**, Fung TT, Li Y, Deitchler M, Angulo E, Birk N, Castellanos-Gutiérrez A, He Y, Fang Y, Matsuzaki M, Zhang Y, Moursi M, Gicevic S, Holmes MD, Isanaka S, Kinra S, Sachs SE, Stampfer MJ, Stern D, **Willett WC**. Development and Validation of a Novel Food-Based Global Diet Quality Score (GDQS). J Nutr. 2021 Oct 23;151 (Supplement\_2):75S-92S. PMID: 34689200

Lo T, Lee Y, Tseng CY, Hu Y, Connelly MA, Mantzoros CS, Karp JM, **Tavakkoli A**. Daily transient coating of the intestine leads to weight loss and improved glucose tolerance. Metabolism. 2021 Oct 20:154917. Online ahead of print. PMID: 34687727

Ke X, You K, Pichaud M, Haiser HJ, Graham DB, Vlamakis H, Porter JA, **Xavier RJ**. Gut bacterial metabolites modulate endoplasmic reticulum stress. Genome Biol. 2021 Oct 15;22(1):292. PMID: 34654459

#### Aquatic foods to nourish nations

Drs. Chris Golden and Jessica Fanzo, speakers at the <u>2021 NORCH symposium</u>, recently published this analysis demonstrating the potential of aquatic foods to reduce food insecurity and improve global nutrition.

Nutrient analysis of foods demonstrates that the top 7 categories of nutrient-rich animal-source foods are aquatic foods. Aquatic foods have the potential to improve health in three ways: (1) reducing micronutrient deficiencies (e.g., deficiency of vitamin A, calcium, or iron), (2) providing omega-3 fatty acids, and (3) displacing the consumption of red meat and processed meat, which contribute to chronic disease.



a. The percentage difference in consumption of mean aquatic animal-source food in 2030 under high-production and baseline-production scenarios. Values greater than zero indicate greater consumption under the high-production scenario.

In modeling of future food systems through 2030, this paper demonstrates that, compared to a baseline "status quo" scenario, a program of increased financial investment, innovation, and management in aquaculture would reduce the price of aquatic foods by 26% and prevent approximately 166 million cases of malnutrition globally while also reducing the consumption of red meat and processed meats. The findings suggest that an increase in production and consumption of aquatic foods has the potential to improve nutrition in many nations, reducing both malnutrition and chronic disease.

**Golden CD**, Koehn JZ, Shepon A, Passarelli S, Free CM, Viana DF, Matthey H, Eurich JG, Gephart JA, Fluet-Chouinard E, Nyboer EA, Lynch AJ, Kjellevold M, Bromage S, Charlebois P, Barange M, Vannuccini S, Cao L, Kleisner KM, Rimm EB, Danaei G, DeSisto C, Kelahan H, Fiorella KJ, Little DC, Allison EH, **Fanzo J**, Thilsted SH. Aquatic foods to nourish nations. Nature. 2021 Oct;598(7880):315-320. Epub 2021 Sep 15. PMID: 34526720

Our work as a Center is measured in part by the contributions we make to published science. Please cite the NIH Grant **P30 DK040561** in all publications that result from the use of NORCH services or resources.

## Featuring: The New NORCH Associate Member Council

The Associate Member Council of the NORCH is open to all Associate Members and is intended to improve support and build community among trainees and early career faculty working in obesity, nutrition, and metabolism research. The Council will be holding events during the year so that Associate Members can meet each other, learn about each other's research, learn about NORCH resources that may benefit them, and provide feedback about how NORCH can be useful to them in advancing their careers.

For inquiries relating to the NORCH Associate Member Council, write to us at <a href="https://harvard.edu"><u>HarvardNORC@mgh.harvard.edu</u></a>. For more information on membership, <a href="mailto:click.edu">click here</a>.

## Meet the Program Leaders



#### Frankie Heyward, PhD

Dr. Heyward is a postdoctoral research fellow in the endocrinology division at Beth Israel Deaconess Medical Center (BIDMC), where he is working in the lab of Dr. Evan Rosen. His primary research involves the use of various cell-type specific high-throughput sequencing, and genetic engineering, approaches to identify transcriptional regulators involved in the neuronal control of energy homeostasis in mice. He is also the Founding Chair of the Harvard Medical School Black Postdoctoral Association (HBPA) and the National Black Postdoctoral Association (NBPA).

#### Carmen Monthé-Drèze, MD

Dr. Monthé-Drèze is a Neonatologist and researcher at the Brigham and Women's Hospital, an Instructor of Pediatrics at Harvard Medical School, and a NORCH Diversity Scholar. Her academic focus is to elucidate early (including prenatal) life modifiable determinants of child outcomes. Specifically, her research focuses on investigating the effects of maternal obesity and dietary inflammation in pregnancy on child neurodevelopment and obesity and on elucidating mechanistic underpinnings of transgenerational obesity in human cohorts.



#### Mabel Toribio, MD

Dr. Toribio is an Endocrinologist, Director of Transgender Health Research within the Metabolism Unit at Massachusetts General Hospital, and Assistant Professor at Harvard Medical School. Her research focuses on the cardiometabolic health of gender-diverse populations. In particular, she is currently leading studies examining the cardiometabolic health of gender-affirming hormone therapy among transgender women with and at risk for HIV. In addition to her research and clinical interests, Dr. Toribio also is highly dedicated to recruiting and mentoring trainees from underrepresented backgrounds in medicine.

#### **Local Events**

## 16th Annual Stare-Hegsted Lecture, Monday Nutrition Seminar Series

Dept of Nutrition, Harvard School of Public Health Monday, Nov 8, 2021, 1-2pm, Virtual

"The Syndemic Perspective on Decreasing U.S. Obesity Prevalence: Opening the Door to New Solutions" Shiriki K. Kumanyika, PhD, MS, MPH, Founder/Chair, Council on Black Health; Professor, Community Health and Prevention, Drexel University

<u>Click here to register</u>. This series occurs on a weekly basis.

#### **Adipose Seminar Series**

Boston Nutrition Obesity Research Center (BNORC) Tuesday, Nov 9, 2021,10-11am Virtual (registration required) and at BUSM, 72 East Concord Street, Evans Building, E120

"Inter-organ crosstalk by bile acids and lipoproteins in cardiometabolic disease" Rebecca Haeusler, PhD, Assistant Professor of Pathology and Cell Biology, Columbia University

<u>Click here</u> for more information. This series occurs every two weeks.

#### **NORCH Annual P&F Symposium**

Thursday, Nov 18, 2021, 1:30-3:30pm, Virtual P&F awardees will share exciting new research in the fields of nutrition, obesity, and metabolism.

Register here to receive livestream details by email. Click here for more information.

#### **Longwood Nutrition Seminar**

Division of Nutrition at Harvard Medical School Tuesday, December 7, 2021, 12-1pm, Virtual

"Beyond BMI and Calories: Taking Nutrition and Cystic Fibrosis to the Next Level" Steven Freedman, MD, PhD, *Beth Israel Deaconess Medical Center* 

For more information, contact <u>Coral Rudie</u> or <u>Barbara Ainsley</u>.

#### National NORC Events

#### **UNC Nutrition Seminar**

UNC Nutrition Obesity Research Center Friday, Nov 5, 2021, 2-3pm EST

"It's About More Than Effectiveness: Optimization of Behavioral and Biobehavioral Interventions." Linda M. Collins, PhD, *Professor of Global Public Health, NYU* 

Register for Zoom details. All are welcome to attend

## Lunch & Learn, Pennington/Louisiana NORC Biorepository Workshop

Thursday, Nov 11, 2021 at 2pm CT & Monday, Dec 6, 2021 at 11am CT

The Pennington/Louisiana NORC Biorepository is a collection of de-identified data from over 13,000 participants in obesity- and nutrition-related human subjects research, including clinical studies of diet, exercise, surgery and special populations.

<u>Click here</u> to register for Nov 11. <u>Click here</u> to register for Dec 6. All NORC members are welcome.

#### Virtual Annual Symposium: Precision Nutrition

Boston Nutrition Obesity Research Center (BNORC) Friday, Dec 10, 2021, 9:00am-12:15pm EST

Sarah Berry, PhD, Reader in Nutritional Sciences, King's College London

Eran Segal, *Professor, Weizmann Institute* José M. Ordovás, PhD, *Director Nutrition and Genomics, JM-USDA-HNRCA at Tufts University* 

Click here to register.

# **Other Opportunities**

Carolina Postdoctoral Program for Faculty Diversity (CPPFD)

Dept of Nutrition, UNC at Chapel Hill Click here for more information.

### Contact Us

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