



NORCH Symposium:

21st Annual Harvard Nutrition and Obesity Symposium

**Non Alcoholic Fatty Liver Disease (NAFLD):
Mechanisms and Novel Therapeutics**

June 30th, 2020

*at The Joseph B. Martin
Conference Center Boston, MA*

Speakers:

George L Blackburn Keynote Speaker: Sotha Biddinger, MD	Bernd Schnabl, MD Miriam Voz, MD Zohair Younossi, MD Mansal Abdelmalek, MD, MPH Rohit Loomba, MD, MHS	Mary Rinella, MD Arun Sanyal, MD Steven Grinspoon, MD Jeffrey Schwimmer, MD
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NORCH **HARVARD MEDICAL SCHOOL** **NIH** National Institute of Diabetes and Digestive and Kidney Diseases

REGISTRATION NOW OPEN!

Please join us in this educational all-day event that will feature internationally recognized speakers addressing the topic of NAFLD: Mechanisms and Novel Therapeutics. *IN THE EVENT THAT THIS SYMPOSIUM IS NOT HELD IN PERSON DUE TO COVID-19, WE WILL HOLD A VIRTUAL MEETING. PLEASE REGISTER IN ORDER TO SECURE A LINK IS EMAILED TO YOU FOR THE VIRTUAL/LIVESTREAM EVENT!* **CLICK HERE TO REGISTER!**

Pilot & Feasibility RFA Announcement:

Seeking applications for NORCH P+F Grants related to Nutrition, Obesity, and Metabolism. Award is \$30,000 over 1 year, with possibility for an additional \$30,000 during year 2 via a competitive renewal if good progress is achieved.

We highly encourage URM applicants to apply for P&F funding in response to this RFA, and we are committed to providing funding to a diverse group of P&F investigators.

Click here for more information and to apply! Application must be submitted by 5:00 p.m. on Wednesday, April 1, 2020. We expect to announce awards by Monday, June 15, 2020 and the funding period will begin August 1, 2020.

NORCH Highlight:

Call for Outstanding Manuscripts Nominations!

The Nutrition Obesity Research Center at Harvard is delighted to announce an Outstanding Manuscript Award to be given to a First Author performing investigation in nutrition, obesity, and/or metabolism. This award is intended for an Assistant Professor, Instructor, or Post-Doctoral Fellow who has made a significant scientific contribution as first author of a manuscript. **Please click here for more information and to submit your nomination for Outstanding Manuscript. Deadline April 1, 2020 5PM.**

Featured Publication: "Racial and Ethnic Disparities in Utilization of Weight Loss Surgery in Adolescents" in *Surgery for Obesity and Related Diseases*. SEE NEXT PAGE!

Recent Publications from NORCH Investigators

Portal Venous Metabolite Profiling After RYGB in Male Rats Highlights Changes in Gut-Liver Axis. Stefater MA, Pacheco JA, Bullock K, Pierce K, Deik A, Liu E, **Clish C, Stylopoulos N.** J Endocr Soc. 2020 Jan 23;4(2): bvaa003. doi: 10.1210/jendso/bvaa003. eCollection 2020 Feb 1. PMID: 32099946.

γδ T cells and adipocyte IL-17RC control fat innervation and thermogenesis. Hu B, Jin C, Zeng X, Resch JM, Jedrychowski MP, Yang Z, Desai BN, Banks AS, Lowell BB, Mathis D, **Spiegelman BM.** Nature. 2020 Feb;578(7796):610-614. doi: 10.1038/s41586-020-2028-z. Epub 2020 Feb 19. PMID: 32076265.

Measures of Adipose Tissue Redistribution and Atherosclerotic Coronary Plaque in HIV. Bogorodskaya M, **Fitch KV, Lu M, Torriani M, Zanni MV, Looby SE, Iyengar S, Triant VA, Grinspoon SK, Srinivasa S, Lo J.** Obesity (Silver Spring). 2020 Feb 21. doi:10.1002/oby.22742. [Epub ahead of print]. PMID: 32086864.

Bone outcomes following sleeve gastrectomy in adolescents and young adults with obesity versus non-surgical controls. **Misra M, Singhal V, Carmine B, Bose A, Kelsey MM, Stanford FC, Bram J, Aidlen J, Inge T, Bouxsein ML, Bredella MA.** Bone. 2020 Feb 19; 134:115290. doi: 10.1016/j.bone.2020.115290. [Epub ahead of print] PMID: 32084562.

Longitudinal Changes in the Relationship Between Hemoglobin A1c and Glucose Tolerance Across Pregnancy and Postpartum. Edelson PK, James KE, Leong A, Arenas J, Cayford M, Callahan MJ, Bernstein SN, Tangren JS, **Hivert MF, Higgins JM, Nathan DM, Powe CE.** J Clin Endocrinol Metab. 2020 Feb 3. pii: dgaa053. doi: 10.1210/clinem/dgaa053. [Epub ahead of print] PMID: 32010954.

International Stroke Genetics Consortium Mendelian Randomization Study of Obesity and Cerebrovascular Disease. Marini S, **Merino J, Montgomery BE, Malik R, Sudlow CL, Dichgans M, Florez JC, Rosand J, Gill D, Anderson CD; Ann Neurol.** 2020 Jan 24. doi: 10.1002/ana.25686. [Epub ahead of print] PMID: 31975536.

Growth in Infants and Children With Intestinal Failure-associated Liver Disease Treated With Intravenous Fish Oil. Raphael BP, Mitchell PD, Gura KM, Potemkin AK, Squires RH, **Puder M, Duggan CP.** J Pediatr Gastroenterol Nutr. 2020 Feb;70(2):261-268. doi: 10.1097/MPG.0000000000002551. PMID: 31978030.

Obesity education in medical schools, residencies, and fellowships throughout the world: a systematic review. Mastrocola MR, Roque SS, Benning LV, Stanford FC. Int J Obes (Lond). 2020 Feb;44(2):269-279. doi: 10.1038/s41366-019-0453-6. Epub 2019 Sep 24. PMID: 31551484.



@ Local NORCH Affiliates

Spring 2020 Monday Seminars, Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts

Monday, March 23, 2020 at 12:00 Noon
"Nutritional interventions to reduce Alzheimer's
disease risk via gut-brain axis" Yu-Hua Tseng,
Ph.D., Associate Professor of Medicine, Harvard
Medical School, Investigator, Section on
Integrative Physiology & Metabolism, Joslin
Diabetes Center

Location: Jean Mayer USDA Human Nutrition
Research Center on Aging, 711 Washington
Street, Auditorium

2020 Research Conference on Teaching Kitchens and Related Self Care Practices hosted by the Harvard T.H. Chan School of Public Health in association with the Teaching Kitchen Collaborative, Inc and partially supported by the NIH.

April 22-23, 2020

Featured speakers will include:

- Frank Hu, MD, MPH, PhD, Chairman,
Department of Nutrition at the Harvard
Chan School of Public Health
- Richard Rothstein, MD, Chair,
Department of Medicine, Geisel School of
Medicine, Dartmouth College
- Nicole Farmer, MD, Post-Doctoral Fellow,
National Institutes of Health Clinical
Center
- Chavanne Hanson, MPH, RD, Food
Choice Architecture & Nutrition Manager,
Global Food Team at Google

The deadline to submit an abstract is
Wednesday, January 15, 2020.

To register [click here](#).

To submit an abstract [click here](#).

For a list of keynote speakers [click here](#).

Location: 1440 Multiversity in Scotts Valley, CA



Publication Spotlight

Featured: Racial and Ethnic Disparities in Utilization of Weight Loss Surgery in Adolescents

Metabolic/bariatric surgery is a highly effective treatment for comorbidities of obesity in adolescents. **NORCH Diversity Scholar Numa Perez, MD**, and colleagues, using 2015-2016 data from the National Inpatient Sample and NHANES, demonstrated significant differences in utilization of metabolic/bariatric surgery by race, ethnicity, and insurance status among 12-19 year olds. Based on NHANES data, severe obesity (class III obesity or class II obesity with hypertension, dyslipidemia, and/or type 2 diabetes) was present in 5% of teens between 2005-2006, corresponding to an estimated 1,659,507 adolescents in the general population with severe obesity. During the same year, 2535 metabolic/bariatric surgeries were performed. Females comprised 35% of those with severe obesity but 77.5% of the individuals undergoing surgery. Whites comprised 38% of those with severe obesity but 52.8% of those undergoing surgery. Compared to white teens with severe obesity, the OR for receiving surgery was 0.50 for black teens with severe obesity and 0.46 for Hispanic teens with severe obesity. Whereas white adolescents with Medicaid were more likely to undergo metabolic/bariatric surgery than privately insured whites (OR 1.66), black and Hispanic adolescents with Medicaid were significantly less likely than their privately insured counterparts to undergo surgery (OR 0.29 for black teens, 0.75 for Hispanic teens). Metabolic/bariatric surgery is currently one of the most effective options for adolescents with severe obesity. These data suggest that it may not be equally available to all, and that efforts to lessen disparities in accessibility to metabolic/bariatric surgery are warranted.

Citation:

Perez NP, Westfal ML, Stapleton SM, **Stanford FC**, Griggs CL, Pratt JS, Chang DC, Kelleher CM. Beyond insurance: race-based disparities in the use of metabolic and bariatric surgery for the management of severe pediatric obesity. *Surg Obes Relat Dis*. 2019. pii: S1550-7289(19)31122-0. doi: 10.1016/j.soard.2019.11.020. [Epub ahead of print] PMID: [31917198](#)



Our work as a Center is measured in part by the contributions we make to published science. Please cite the National Institutes of Health Grant P30 DK040561 in all publications that results from the use of NORC-H services or resources.

Do you have a suggestion for a publication feature?
Please send the citation to:
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Cite the grant! P30 DK040561



Investigator Spotlight

Sarhattama (Rimi) Sen, MD

Title: Assistant Professor of Pediatrics,
Harvard Medical School

Current Appointments: Attending Neonatologist,
Brigham and Women's Hospital

Background: I am a graduate of the Penn State/Jefferson Medical College combined program. During medical school, I found that I was drawn to pediatrics, both because of the fascinating physiology of fetal and neonatal development and because of the profound public health implications of child health outcomes. I pursued pediatrics residency and neonatal-perinatal medicine fellowship at The Children's Hospital of Philadelphia. During fellowship, under the mentorship of Dr. Rebecca Simmons, I realized that my interest and passion lied in understanding the critical impact of maternal obesity, which affects one in three women, on lifelong child health outcomes. After graduation, my first faculty position was at Tufts Medical Center, where, with the support of exceptional mentors at the Medical Center and The HNRCA, I grew my skillset in translational research. In 2014, I joined the Brigham and HMS faculty and have been fortunate to continue investigation of the impact of maternal obesity through translational, clinical and epidemiological studies under the guidance of additional superb mentors, each of whom has been pivotal in moving my research forward in different directions.

Research Interests: I currently have three main areas of research focus. The first is to understand mechanisms that link obesity during pregnancy and lactation with dysregulated offspring development and growth. I am particularly interested in maternal nutritional factors, such as micronutrients and fatty acids, that influence inflammation and oxidative stress during pregnancy and post-partum period through breastmilk composition. The second area of interest is the link between maternal obesity and neonatal hypoglycemia. I have led clinical initiatives around neonatal hypoglycemia at BWH, and this area of interest stemmed from these initiatives. The third area is related to developing improved methodology for assessment of breastmilk composition to improve infant growth and development.

How have NORCH and/or NORCH Core Services helped: NORCH support has been fundamental in examining the role of maternal obesity and breastmilk composition and infant growth and health outcomes. With NORCH P+F funding, we have been able to measure breastmilk composition, including cytokines, fatty acids and novel mediators such as fatty acid hydroxyls of fatty acids and specialized pro-resolving lipid mediators and relate these to infant growth trajectories and respiratory health outcomes.



What inspired you to become an academic researcher?

As a neonatologist, my motivation in pursuing research and an academic career is to improve how we care for mothers and babies. I believe that conducting patient-centered translational research can lead to innovative approaches to improve care and outcomes for the next generation. I am also motivated by interaction with trainees who ask critical questions at the bedside and constantly remind us why we embarked on this career path.

What do you think is the biggest gap in our knowledge about obesity or nutrition?

We are just beginning to understand the importance of maternal nutrition, particularly in the context of obesity, on fetal and infant health. This fundamental gap in knowledge is the foundation for the health of future generations.

If you could change one thing about the way we conduct or communicate research, what would it be?

I believe just as much can be learned from negative results as positive results. I think that the publication bias towards positive findings should be changed by encouraging the dissemination of well-conducted negative studies by medical journals.

What advice would you give someone considering a career in research? See the quotes below

What is your favorite quote or saying? I have three work-related quotes that I try to remember: "Don't get attached to the data"; "The reward for working hard is just that, the work"; "Don't get mad, just do a study!"

How do you spend your time outside of work?

I spend my time outside of work with my family (husband, two busy school-age kids and a not-busy golden retriever puppy), cooking and eating, doing lots of activities outdoors and traveling when possible.



The News from other NORC's

[Nutrition Obesity Research Center @ Columbia](#)

DeWitt Goodman Seminar Series

Wednesday, March 18, 2020- Nada Abumrad, PhD, *Dr. Atkins Professor of Obesity Research in Medicine*

Professor of Cell Biology and Physiology, Washington University, "CD36 Membrane Signaling in Fatty Acid Uptake and Metabolic Regulation"

[Nutrition Obesity Research Center @ Boston University CONT.](#)

Adipose Seminar Series sponsored by the Adipose Tissue Biology and Nutrient Metabolism Core (ABM) of the Boston Nutrition Obesity Research Center

Tuesday, March 24, 2020 from 10:00-11:00AM

"New thermogenic pathways in energy metabolism" Yu-Hua Tseng, Ph.D., Associate Professor of Medicine, Harvard Medical School, Investigator, Section on Integrative Physiology & Metabolism, Joslin Diabetes Center

Location: BUMC, EBRC Building, 650 Albany Street, 7th Floor, Room 714

[The Obesity Society \(TOS\) Symposium presented by the NORC at Harvard](#)

"Obesity and Addiction: Convergence of Two Critical Pathways"

Georgia World Congress Center (GWCC), 285 Andrew Young International Blvd NW, Atlanta, GA 30313

TOS ObesityWeek® Annual Meeting Scientific Sessions: Tuesday, November 3rd – Friday, November 6th, 2020

NORCH-presented Symposium on Tuesday, November 3rd, 2020 at 1:30pm-3:30pm

Join us for this NORCH-sponsored Symposium investigating the importance of addiction pathways in obesity!

[UAB-Short Course on Strengthening Causal Inference in Behavioral Obesity Research!](#)

June 8 – June 12, 2020, Chicago, IL

Identifying causal relations among variables is fundamental to science. Obesity is a major problem for which much progress in understanding, treatment, and prevention remains to be made. Understanding which social and behavioral factors cause variations in adiposity is vital to producing, evaluating, and selecting intervention and prevention strategies. In addition, developing a greater understanding of obesity's causes requires input from diverse disciplines including statistics, economics, psychology, epidemiology, mathematics, philosophy, and behavioral or statistical genetics. However, applying techniques from these disciplines does not involve routine well-known 'cookbook' approaches. Rather, an understanding of the underlying principles is required so that the investigator can tailor approaches to specific and varying situations.

For full details of each of the courses, please refer to our websites:

[Strengthening Causal Inference in Behavioral Obesity Research](#)

Travel scholarships are available to selected early career investigators.

Women, members of underrepresented minority groups, and individuals with disabilities are encouraged to apply.

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