



NORC News: July 2025



From the Director: Paul MacLean, PhD

A big thanks goes to Ed Melanson and the organizing committee he recruited for the NORC-sponsored Summer Workshop on the Gut Microbiome. A lot of work went into making this event the success that it was this past month. More details about the workshop and the fantastic turn out can be found further down in this newsletter.

As our leadership team anxiously awaits the notice of award for the Colorado NORC's competitive renewal, we are happy to announce the recruitment of a new External Advisory Board (EAB), which will provide feedback and guidance for our center over the next five years. The new members of our EAB are:



Kelly Allison, PhD

Prof of Psychology in
Psychiatry
Perelman School of
Medicine
University of
Pennsylvania



Prof of Reproductive Endocrinology & Women's Health Pennington Biomedical Research Center Louisiana State University

Leanne Redman, PhD



Kirk Habegger, PhD

Assoc. Prof of Medicine Division of Endocrinology, Diabetes, and Metabolism University of Alabama Birmingham



Saame "Raz" Shaikh, PhD

Prof and Chair of Nutrition Gillings School of Public Health University of North Carolina - Chapel Hill



Jeffrey Zigman, MD PhD

Prof of Internal
Medicine
Kent and Jodi Foster
Distinguished Chair in
Endocrinology
University of Texas
Southwestern



Ellen Schur, MD MS

Prof of Medicine Clinical Research Director UW Medicine Diabetes Institute University of Washington

These individuals are outstanding scientists and leaders in our community, and all are actively engaged in NORCs and/or other relevant centers at their own institutions. We want to thank these esteemed colleagues for joining our efforts to support nutrition and obesity-related research at the University of Colorado. One of the most important responsibilities of our EAB members is helping us with our pilot and feasibility program. The newest awardees of this program have just been announced and can be found further down in this newsletter.

Quick Announcements



Special Seminar

Tuesday, August 12th at 12pm in RC1S room 7109

Darleen Sandoval will be hosting **Danny Ben Zvi, PhD** from Hebrew University who will be providing a talk "Is glucose regulation predictive or responsive? Lessons from from postprandial and post exercise physiology".



2025 NORC Awards

Announcement coming in October. This is a good time to start thinking of who you might like to nominate! View more about our award program and categories on our <u>website</u>.

Faculty Highlight: Tim Lahm, MD

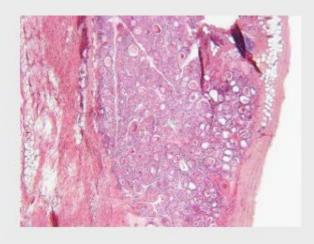
Dr. Tim Lahm is a physician scientist in the Division of Pulmonary, Critical Care and Sleep Medicine at National Jewish Health and University of Colorado with a focus on the study of sexual dimorphisms in lung vascular remodeling and right ventricular (RV) adaptation in pulmonary hypertension (PH). He serves as the Director of Pulmonary Vascular Biology at NJH. The overall goal of his research is to identify novel therapeutic interventions for PH-induced RV and lung vascular dysfunction. In particular, he is interested in gender differences in PH and the role of sex hormones in PH and RV failure.



His laboratory is studying mechanisms of how sex hormones such as 17β-estradiol affect lung and RV endothelial cell homeostasis as well as cardiomyocyte function during PH and RV failure development. A specific focus is on deciphering how estrogen receptor alpha promotes resilience to maladaptive RV remodeling by regulating angiogenesis, contractile signaling and inflammatory processes. Recent lines of investigation focus on deciphering how 17β-estradiol and estrogen receptor alpha regulate fatty acid oxidation and mitochondrial function in RV endothelial cells as well as NLRP3 signaling in RV cardiomyocytes. Other areas of interest in Tim's lab include studies of hypoxia-induced lung vascular and RV remodeling, neurohormonal signaling in the RV, exercise effects on RV and pulmonary vascular function, and novel PH phenotypes in the veteran population. Tim's lab recently expanded its studies of sexually dimorphic lung diseases to study androgen signaling in asthma and to identify mechanisms of how androgens modulate airway epithelial cell function. Tim's research is funded through the NIH, AHA and the Department of Veterans Affairs. He is heavily involved with multiple professional societies and previously served as the Chair of the American Thoracic Society Pulmonary Circulation Assembly. He is particularly proud of his mentoring record and feels fortunate that he is able to work with outstanding students, postdocs, fellows and junior faculty. Seeing these people develop their careers and exhibit personal growth is the most rewarding aspect of his career.

Tim's clinical interest is in PH, RV failure and lymphangioleiomyomatosis - conditions that exhibit significant gender biases and that disproportionally affect women. He is also passionate about critical care medicine and provides care to critically ill patients in the intensive care unit at the Rocky Mountain Regional VA Medical Center.

When he is not writing about himself in the third person, Tim enjoys mountain biking, paddle boarding, sailing, skiing, hiking, camping, cooking, exploring microbreweries, traveling, and spending time with his family, dog, and cat (all of which are foodies and have very high standards when it comes to food).



Special Issue in the Frontiers of Endocrinology: Submission Requests

More Information

Gut Microbiota and Cardiovascular Endocrinology: Emerging Insights

Manuscript Summary Submission Deadline: 23 August 2025

Manuscript Submission Deadline: 14 December 2025

This special issue invites studies exploring the intricate connections between gut microbial communities and blood pressure regulation, including their influence on angiotensin-converting enzyme (ACE) levels, gut microbial diversity in hypertension, and microbiome-targeted antihypertensive therapies, such as specific probiotic strains and dietary supplements. We welcome research on the production of bioactive, hormone-like microbial metabolites, including short-chain fatty acids (acetate, butyrate, propionate) and tryptophan derivatives, which regulate insulin sensitivity, serotonin synthesis, blood pressure homeostasis, and inflammation. Further emphasis is placed on the signaling, epigenetic, and metabolic actions of microbial metabolites on blood and vascular cells, as well as novel metabolite-protein interactions that modulate intracellular signaling networks.

This issue will also highlight advancements in personalized microbiota-based cardiovascular therapies, including the use of advanced sequencing and machine learning to identify microbiome signatures linked to cardiovascular risk. Additionally, we encourage studies on microbiome-based drug development, exploring engineered probiotics and postbiotics as precision interventions, along with investigations into diet-microbiome interactions and their impact on gut microbial composition for optimizing cardiovascular health.

Finally, we seek updates on current clinical trials, studies elucidating causal relationships between microbiome alterations and cardiovascular outcomes, and multi-omics integration approaches for developing personalized treatment strategies.

Shared by Evgenia Gerasimovskaya, PhD, Topic editor for Frontiers in Endocrinology. Please contact Dr. Gerasimovskaya with any questions.

2025 NORC Summer Workshop: The Gut Microbiome in Health and Disease



This year's NORC Summer Workshop was held on July 14th and attracted over 100 attendees and more than 10 individuals joining us via Zoom - our largest turnout since we began providing our summer workshops in 2021. We had 12 speakers providing presentations on different areas of the Gut Microbiome including Early Life Development, Obesity and CardioMetabolic Disease, and Dietary Approaches to the Microbiome. All presentations were recorded and are available to anyone.

Thank you to all who attended and helped make this year's workshop a success!



Recordings

2025 NORC Pilot Program Awardees

The NORC received 20 applications for our Pilot & Feasibility program this year. The Executive Committee and External Advisory Board reviewed all applications and has decided to award the following individuals with the NORC Pilot Award pending the arrival of our NOA funds. Please congratulate the following individuals the next time you see them:



Avery Kramer, PhD
Post-doctoral Fellow
Division of Reproductive Sciences
Dept. of Obstetrics & Gynecology

Project Title: "Placental Proteins as a Novel Intervention to Prevent Adult Metabolic Liver Disease in Prematurity"



Curtis Tilves, PhD
Research Associate
Department of Epidemiology/Lifecourse Epidemiology of Adiposity and
Diabetes (LEAD) Center

Project Title: "Food genomics to objectively characterize healthy dietary patterns and their associations with cardiometabolic health during pregnancy"



Anthony Wang, MD, PhD T32 Postdoctoral Fellow Department of Pediatrics Section of Nutrition

Project Title: "Modeling Maternal Obesity Effects on Offspring Stellate Cell Activation Using Umbilical Cord Mesenchymal Stem Cells"



Clinical Methods for Nutrition and Obesity Research

October 6-9, 2025 Pennington Biomedical Research Institute

This four-day intensive course will include didactic seminars, hands-on or observational training, and data analysis workshops covering methodologies in body composition, carbohydrate metabolism, exercise testing, and energy requirements & expenditure. Opportunities for career development and poster presentations will also be available.

Dates: October 6-9, 2025

Location: In-person at Pennington Biomedical Research Center, Baton Rouge, LA

Registration: Free. A \$500 stipend will be provided for travel. Hotel and local transportation are covered. Receipt of stipend is contingent upon signing an agreement that the return flight on October 9 will be after the course concludes at 2:00 PM.

Instructors: Leanne Redman, PhD (Course Director), Eric Ravussin, PhD, Steve Heymsfield, MD, Neil Johannsen, PhD, Corby Martin, PhD, Jennifer Rood, PhD, Emily Flanagan, PhD, Ursula White, PhD, Adam Lowe, PhD, and more

Application: Applicants should demonstrate involvement in obesity, nutrition, or a related research field; benefit from using the methods taught in this course; and show a trajectory toward becoming an independent investigator. Completed applications must be received by September 1st.

Application

Website

SAVE THE DATE: Monday, October 6th NORC Retreat 2025

We have started making plans for our 2025 NORC Retreat which will be held in the Donald E. Elliman Conference Center on Monday, October 6th. We've taken some of your feedback from last year's retreat and plan to provide more time for poster viewing/judging, a larger focus on research happening within the NORC and a presentation about opportunities in industry among some other changes.

More details will be coming soon, but save the date so you don't miss this year's retreat!





Is there someone working in the area of obesity or nutrition that you'd like to see speak on campus? You can nominate them for NORC sponsorship.

Nominate a Speaker

NORC Partners

Thank you to all of our partners for your collaboration and support.

- · Anschutz Health & Wellness Center (AHWC)
- · Anschutz Medical Campus
 - Dept of Orthopedics
 - Division of Endocrinology
 - Dept of Pediatrics, Section of Nutrition
- · Barbara Davis Center (BDC)
- · Centers on Aging (CoA)
- Centers for American Indian & Alaska
 Native Health (CAIANH)
- Colorado Clinical Translation Science
 Institute (CCTSI)
- · LEAD Center
- <u>Ludeman Center for Women's Health</u>
 Research
- Office of Laboratory Animal Research
 (OLAR)
- · Perinatal Research Center
- · UC Cancer Center (UCCC)

Journal Clubs

Held Monthly from Sept—May More info on journal clubs **HERE**.

- FAT Chat
 4th Thursday at 3pm
 Organizer: Andrew Libby
- BAT Chat
 2nd Monday at 10am
 Organizer: Ed Melanson
- Physical Activity MADness
 3rd Tuesday at 10am
 Organizer: Ana Pinto
- Molecular Metabolism
 4th Thursday at 4pm
 Organizers: Amy Keller & Kimberly Bruce
- Muscular Skeletal Working Group Last Tuesday at 11am
 Organizer: Andrea Bonetto
- · Bone Think Tank 2nd Monday at 4pm Organizers: Christine Swanson & Sarah Wherry
- SuperMito Group
 4th Tuesday at 10:30am
 Organizer: Cecilia Caino

Cite the Grant

Did you use any of the Colorado NORC resources to support your published research? Please site the NIDDK Grant Number: DK048520

Membership

Not yet a member of the Colorado NORC? Email your CV/BioSketch to: norc@cuanschutz.edu

Have questions or an idea for the next NORC News?
Email our Program Administrator: Olivia.Schmidt@cuanschutz.edu



E: norc@cuanschutz.edu www.cunorc.org



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