

**CURRICULUM VITAE**  
**Wei Perng, PhD MPH**

**1. CURRENT POSITION**

Associate Professor (with tenure), Department of Epidemiology, Colorado School of Public Health  
Associate Director of Research Training and Education, Lifecourse Epidemiology of Adiposity and Diabetes (LEAD) Center  
University of Colorado Anschutz Medical Campus  
1890 N. Revere Court, Campus Box F426, Room 1014 Aurora CO, 80045  
E-mail: [Wei.Perng@CUAnschutz.edu](mailto:Wei.Perng@CUAnschutz.edu)

Adjunct Associate Professor, Visiting Instructional Lecturer, Department of Nutritional Sciences  
University of Michigan School of Public Health

**2. EDUCATION**

2008 University of Michigan, Brain Behavior and Cognitive Science, BS  
2010 University of Michigan School of Public Health, Epidemiology, MPH  
2013 University of Michigan School of Public Health, Epidemiology, PhD  
2013-2014 Harvard Medical School, Postdoctoral fellowship, Perinatal Epidemiology  
2014-2015 Michigan State University, T-32 Postdoctoral fellowship, Perinatal Epidemiology

**3. ACADEMIC APPOINTMENTS AND POSITIONS**

**University of Michigan School of Public Health, Ann Arbor, MI**

2015 - 2017 Research Assistant Professor, Department of Nutritional Sciences and Epidemiology  
2018 - Adjunct Associate Professor, Department of Nutritional Sciences  
2022 - Adjunct Instructional Lecturer, Department of Nutritional Sciences

**University of Colorado Anschutz Medical Campus, Aurora, CO**

2018 - 2023 Assistant Professor, Department of Epidemiology, Colorado School of Public Health  
2018 - 2022 Assistant Director of 'Omics Science, Lifecourse Epidemiology of Adiposity and Diabetes (LEAD) Center  
2022 - Associate Director of Research Training and Education, Lifecourse Epidemiology of Adiposity and Diabetes (LEAD) Center  
2023 - Associate Professor (with tenure), Department of Epidemiology

**4. HONORS AND AWARDS**

2013 DeVries Award for Excellence in International Health Award, University of Michigan School of Public Health  
2014 Early Nutrition New Investigator Award at the Early Nutrition Conference  
2014 Obesity Research Interest Section Research Competition 1<sup>st</sup> place winner  
2019 Society for Pediatric and Perinatal Epidemiologic Research (SPER) Rising Star Award  
2020 University of Colorado Denver Chancellor's Teaching Recognition Award  
2022 Colorado School of Public Health Faculty Excellence in Diversity, Equity, and Inclusion (DEI) Award

**5. PROFESSIONAL AFFILIATIONS**

2010 - Present Society for Pediatric and Perinatal Epidemiologic Research (SPER)

2010 - 2015 Society for Epidemiologic Research (SER)  
2012 - 2018 American Public Health Association (APHA)  
2016 - 2019 Developmental Origins of Health and Disease U.S. Affiliate Chapter  
2018 - 2019 American Heart Association (AHA)  
2018 - Present American Diabetes Association (ADA)  
2021 - Present American College of Epidemiology (ACE; elected membership)

## **6. PROFESSIONAL LEADERSHIP AND SERVICE**

### **Department of Epidemiology and the LEAD Center:**

2018 - 2022 Assistant Director of Omics Research, LEAD Center  
2018 - 2019 Member, MPH Admissions Committee  
2020 - Present Chair, Health Equity Council  
2021 - 2022 Chair, Epidemiology Department Tenure Track Faculty Search Committee  
2021 Member, Epidemiology Department Research Track Faculty Search Committee  
2022 - Present Associate Director of Research Training and Education, LEAD Center  
2023 - 2024 Member, PhD/MS Admissions Committee

### **Colorado School of Public Health:**

2018 Member, Tobacco Prevention & Control Faculty Search Committee  
2020 Member, Scholarship Committee  
2020 Member, Public Health Practice Committee  
2022 Member, Dean's Search Committee  
2023 - Present Member, Departmental Appointments, Promotion & Tenure Committee (DAPTCO)  
2023 - 2024 Member, Department of Environmental and Occupational Health (EOH) Chair Search Committee

### **University of Colorado Denver Anschutz Medical Campus:**

2021 - Present Member, External Advisory Board, Department of Emergency Medicine Diversity Committee

### **National:**

2020 - 2022 Member, Environmental Influences on Child Health Outcomes (ECHO) Program Publications Committee  
2020 - Present Co-Chair, American Diabetes Association (ADA) Precision Medicine In Diabetes Consensus Report, Precision Prognostics Working Group for Gestational Diabetes Mellitus  
2021 - 2023 Member, Society for Pediatric and Perinatal Epidemiologic Research (SPER) Planning Committee  
2022 - 2023 Associate Chair, Environmental Influences on Child Health Outcomes (ECHO) Program Publications Committee  
2023 - 2024 Interim Steering Committee, Environmental Influences on Child Health Outcomes (ECHO) Program  
2024 - Present Co-Chair, Environmental Influences on Child Health Outcomes (ECHO) Program Publications Committee

### **International:**

2017 - Present Member, Canadian Healthy Infant Longitudinal Development (CHILD) Study, Nutrition and Dietary Data Collection Working Group  
2018 - Present Steering Committee Member, Consortium of Metabolomics Studies (COMETs)

## 7. REVIEW, REFEREE AND EDITORIAL ACTIVITIES

### Service on editorial boards:

- 2018 - Present Associate Editor, *Pediatric Obesity*  
2021 - Associate Editor, *Annals of Epidemiology*

### Guest editor for special issues:

- 2019 Guest Editor of Special Issue, “Exposure to Endocrine-Disrupting Chemicals and Cardiometabolic disease: A Developmental Origins Approach” in *Frontiers of Public Health*:  
<https://www.frontiersin.org/research-topics/6888/exposure-to-endocrine-disrupting-chemicals-and-cardiometabolic-disease-a-developmental-origins-appro>
- 2022 Guest Editor of Special Issue, “Determinants, mechanisms, and consequences of childhood obesity” in *Metabolites*:  
[https://www.mdpi.com/journal/metabolites/special\\_issues/Obesity\\_Childhood](https://www.mdpi.com/journal/metabolites/special_issues/Obesity_Childhood)

### Grant review committees and study sections:

- 2016 *Ad hoc* reviewer, Michigan Regional Comprehensive Metabolomics Core Pilot & Feasibility Grant  
2017 *Ad hoc* reviewer, University of Michigan Momentum Center Pilot & Feasibility Grant  
2019 *Ad hoc* reviewer, Southern California Environmental Health Sciences Center Pilot Project Program  
2021 *Ad hoc* reviewer, Medical Research Council (MRC), U.K. Research and Innovation (UKRI), Future Leaders Fellowship  
2022 *Ad hoc* member, National Institutes of Health (NIH) Child Health and Development (CHHD)-M1 Health, Behavior, and Context Study Section  
2022 *Ad hoc* reviewer, Medical Research Council (MRC), U.K. Research and Innovation (UKRI), MRC Research Grant Program  
2022 External reviewer, National Institute of Environmental Health Sciences (NIEHS), Intramural Research Application  
2023 *Ad hoc* member, National Institutes of Health (NIH) Analytics and Statistics for Population Research Panel B (ASPB) Study Section.  
2023 *Ad hoc* member, Child Health, and Human Development Panel M (CHHDM) Study Section.  
2023 Reviewer, Colorado Clinical Translational Science Institute (CCTSI) KL2 Scholarship Program

### *Ad hoc* reviewer for journals:

Academic Pediatrics; American Journal of Epidemiology; American Journal of Clinical Nutrition; Annals of Epidemiology; BMC Research Notes; BMC Medicine; BMC Public Health; Diabetes and Metabolism; Diabetes Care; Diabetologia; Diabetic Medicine; Epigenetics; Environmental Health Perspectives; Environment International; Environmental Research; Epidemiology; Hypertension; International Journal of Obesity; International Journal of Epidemiology, Pediatric Obesity; JAMA; JAMA Pediatrics; Journal of Adolescent Health; Journal of the American College of Nutrition; Journal of Developmental Origins of Health and Disease; Journal of Endocrinology; Journal of Epidemiology and Community Health; Journal of Nutrition; Journal of Pediatrics; Metabolites; Metabolomics; Obesity (Silver Spring); Pediatric & Perinatal Epidemiology; Public Health Nutrition

### Service for professional societies and scientific meetings:

#### *Scientific program director:*

2017, 2018 Asian and Pacific Islander Caucus (APIC) for the American Public Health Association (APHA)

**Session chair:**

- 2017 Session chair, “*AAPI Epidemiology, Climate Changes, and Environmental Health.*” American Public Health Association (APHA) November 2nd – 9th Atlanta, Georgia.
- 2017 Session chair, “*Obesity and diabetes in pregnancy.*” U.S. Developmental Origins of Health and Disease (DOHaD) meeting September 25th – 27th. Detroit, Michigan.
- 2018 Session chair, “*Health education, health communications, and community-based interventions among AA&PIs.*” American Public Health Association (APHA) November 10th – 14th. San Diego, California.
- 2018 Session chair, “*Innovative research to examine AA&PI health.*” American Public Health Association (APHA) November 10th – 14th. San Diego, California
- 2018 Session chair, “*The intersection of mental and physical health among AA&PIs and AA&PI communities.*” American Public Health Association (APHA) November 10th – 14th. San Diego, California.
- 2020 Session chair, “*Obstetric Health.*” Society for Pediatric and Perinatal Epidemiology (SPER) Annual Meeting. December 15th. Virtual meeting.
- 2021 Session chair, “*Social determinants of Birth outcomes.*” Society for Pediatric and Perinatal Epidemiology (SPER) Annual Meeting. June 21st. Virtual meeting.

**Abstract reviewer for scientific meetings:**

Experimental Biology 2019; The Obesity Society 2019; Society for Epidemiologic Research (SER) Annual Meeting, 2019; Society for Pediatric & Perinatal Epidemiologic Research (SPER) Annual Meeting, 2019, 2020, 2021; American Public Health Association (APHA) Annual Meeting, 2016, 2017, 2018, 2019

**8. INVITED LECTURES, PRESENTATIONS, AND WORKSHOPS**

**Local/regional:**

Seminars:

- 2019 University of Colorado Boulder Department of Physiology Colloquium. *Lifecourse Epidemiology: It's more than skin-deep.* September 16th. Boulder, CO, USA.
- 2020 Perinatal-Neonatal Research Group Weekly Conference, Department of Pediatrics, School of Medicine, University of Colorado Anschutz Medical Campus. *Use of directed acyclic graphs (DAGs) to streamline the research process.* November 12th. Aurora, CO, USA.
- 2021 Department of Endocrinology Research Seminar. *Testing conceptual models from lifecourse epidemiology: sensitive period or accumulation of risk?* April 28th. Aurora, CO, USA.
- 2022 Division of Biomedical Informatics & Personalized Medicine Research Seminar. *Origins of metabolic disease in youth: Moving metabolomics research towards clinical application.* May 4<sup>th</sup>, Aurora, CO, USA.
- 2022 Lifecourse Epidemiology of Adiposity and Diabetes (LEAD) Seminar Series. *'Omics + lifecourse epidemiology: merging two paradigms to advance precision prevention of metabolic risk in youth.* September 19<sup>th</sup>, Aurora, CO, USA.
- 2022 Center for Health, Work, and the Environment (CHWE) Visiting Scholar Series. *'Omics for exposure assessment and disease prevention: Insights from studies of metabolic risk in youth.* October 26<sup>th</sup>. Aurora, CO.
- 2023 Panelist and session moderator for the Colorado School of Public Health Research exchange. *Assessing structural racism in public health research.* October 6<sup>th</sup>, Aurora, CO.

Guest lectures for classes:

- 2020 Colorado School of Public Health, Department of Epidemiology, EPID 6612 (Analytical Epidemiology; course instructor: Angela Lee-Winn), *Causal inference: lessons from lifecourse epidemiology*. April 1st.
- 2020 Colorado School of Public Health Department of Epidemiology, EPID 7605 (Research Methods; course instructor: Kathy James), *Introduction to DAGs*. February 6<sup>th</sup>.
- 2020 Colorado School of Public Health, Department of Epidemiology, EPID 7631 (Advanced Epidemiology 1; course instructor: Anne Starling), *Directed acyclic graphs (DAGs)*. September 28<sup>th</sup>.
- 2021 University of Michigan School of Public Health, Department of Nutritional Sciences, NUTR 677 (Physical Growth and Maturation; course instructor: Karen Peterson), *Making causal inference from observational studies*. November 23<sup>rd</sup>.
- 2021 University of Colorado Denver School of Public Affairs, PUAD 8070 (Quantitative Methods II; course instructor: Geoffrey Propheter), *Causal diagrams and development of research hypotheses*. March 2<sup>nd</sup>.
- 2021 University of Cincinnati, Department of Epidemiology, BE-7085 & PH-7085 (Pediatric and Perinatal Epidemiology; course instructor: Kelly Brunst), *Early development of metabolic disorders*. November 17<sup>th</sup>.
- 2022 University of Colorado Denver School of Public Affairs, PUAD 8070 (Quantitative Methods II; course instructor: Geoffrey Propheter), *Causal inference in policy research: an epidemiological spin*. March 30<sup>th</sup>.
- 2022 University of Colorado Anschutz School of Medicine, PMED 6210 (MultiOmic Approaches to Personalized Medicine; course instructors: Colleen Julia and Ivana Yang), *Omics science in the study of developmental origins of health and disease (DOHaD)*. Pre-recorded guest lecture for Fall Semester 2022.
- 2023 University of Colorado Boulder Integrative Physiology Colloquium. *Lifecourse epidemiology & omics science: merging two paradigms to advance metabolic disease prevention in youth*. Boulder, CO, February 1<sup>st</sup>, 2023

**National:**

Invited talks, seminars, and workshops:

- 2018 SEARCH For Diabetes in Youth Steering Committee Meeting 2018. *Metabolomics, obesity, and nutrition*. November 14<sup>th</sup>. Denver, CO, USA.
- 2019 Environmental influences on Child Health Outcomes (ECHO) Face-to-Face Meeting 2019. *The utility of metabolomics in ECHO*. April 9<sup>th</sup>. Washington D.C.
- 2019 Nutritional Epidemiology Research Interest Section (RIS), American Society for Nutrition 2019. *Metabolomic biomarkers of the relationship between sugar-sweetened beverage (SSB) intake and metabolic risk in the ELEMENT Cohort*. June 10<sup>th</sup>. Baltimore, MD, USA.
- 2021 ELEMENT Research Seminar, University of Michigan School of Public Health and the Instituto Nacional de Salud Pública. *Causal diagrams in the study of DOHaD*. February 23<sup>rd</sup>. Virtual seminar.
- 2021 University of Washington Epidemiology Winter Seminar Series. *Let the question derive the methods: testing conceptual models from lifecourse epidemiology*. March 9<sup>th</sup>. Virtual seminar.

- 2021 National Academy of Science, Engineering and Medicine, Methods Workshop on Assessing Food and Dietary Supplement Intakes in Pregnant Women and Children 2-11 years. *Best practices for dietary assessment in children age 6-11 years*. May 19<sup>th</sup>. Virtual workshop.
- 2021 Wayne State University, Department of Pharmacology Seminar Series. *Data are profoundly dumb: let the question drive the approach to obtain the answer*. October 29<sup>th</sup>. Virtual seminar.
- 2022 American Diabetes Association Annual Meeting, Invited symposium presentation. *Use of metabolomics to assess metabolic risk in offspring exposed to diabetes in utero: Steps toward clinical application*. June 5<sup>th</sup>. New Orleans, LA, USA.
- 2022 National Institute of Environmental Health Sciences (NIEHS) Workshop on the modifying impact of nutrition on environmental risk factors for autism spectrum disorder. *You are what you eat... and metabolize: biomarkers of dietary intake and how metabolomics can help*. June 22<sup>nd</sup>. Webinar.
- 2022 Environmental Influences on Child Health Outcomes (ECHO) Consortium Face-to-Face Meeting. Moving towards Multi-Omics of Developmental Origins of Health and Disease (MO DOHaD). October 19<sup>th</sup>. Bethesda, MD.
- 2023 Environmental Influences on Child Health Outcomes (ECHO) Discovery Series. Understanding the natural history of cardiovascular health. November 8<sup>th</sup>, 2023. Virtual.
- 2023 University of Michigan School of Public Health, Nutritional Sciences Seminar Series. Preventing metabolic disease in youth: how can we do better? Ann Arbor, MI. February 17<sup>th</sup>, 2023.
- 2023 University of North Carolina Chapel Hill Environmental/Occupational Epidemiology Seminar Series. *Advancing metabolic disease prevention in youth through Precision medicine, Omics, and Data Science (PODS)*. December 1<sup>st</sup>, 2023.

**International:**

- 2021 Precision Diabetes Medicine (PDM). *Long-term consequences of exposure to gestational diabetes in utero: use of 'omics*. April 9<sup>th</sup>. Virtual conference.
- 2022 COMETs Consortium Scientific Talk. *Metabolomics predictors of dysglycemia in two youth cohorts: leveraging the COMETs consortium*. July 21<sup>st</sup>. Virtual seminar.
- 2022 Universidad Iberoamericana, Masters of Applied Nutrition Program, *Metabolomics for the advancement of nutrition research*. November 28<sup>th</sup>. Mexico City, MX.
- 2022 Universidad Iberoamericana, Masters of Applied Nutrition Program. *Directed acyclic graphs and causal inference concepts*. November 29<sup>th</sup>. Mexico City, MX.

**9. TEACHING RECORD**

**Courses Developed and Taught:**

University of Colorado

*Colorado School of Public Health:*

- 2019 - Present EPID 7632 - Advanced Epidemiology II (3-credits)  
Role: Developed and taught as primary instructor (5 semesters; ongoing)

*Colorado Center for Clinical and Translational Sciences Institute (CCTSI) Biostatistics Epidemiology, and Research Design (BERD):*

- 2023 – Present Causal Inference in Epidemiology (certificate program short course)  
Role: Developed and taught as primary instructor

University of Michigan School of Public Health

- 2015 - 2017 NUTR 689 - Advanced Topics in Nutrition Research (2-credits)  
Role: Primary instructor (5 semesters total)
- 2022- NUTR 596 - Precision Nutrition and 'Omics (3-credits)  
Role: Developed and taught as primary instructor (1 semester; ongoing)

**MPH Academic Advising:**

- 2018 - 2020 Kathleen Angell, Phuong Banh
- 2019 - 2021 Sierra Svend, Ryan Patrick, Rachel Haley, Jesse Carlson
- 2020 - 2022 Nikita Tovey, Janeese Porterfield, Jyothi Lokandham (international), Kelsey Coogan, Cody Berkobien
- 2021 - 2023 Allison Haynes, Samuel Messenger, Ndiebso Agbormbai, Jesse Carlson, Brianna Hoffman
- 2022 - 2024 Sarah Conway, Madeline Wrolson-Gaunt, Amelia Staniszewski
- 2023 – 2025 Madeline Karr,

**MPH Capstone Advising:**

University of Michigan School of Public Health:

- 2015 - 2017 Aarohee Fulay, MPH

Colorado School of Public Health:

- 2018 - 2019 Kathleen Angell, MPH
- 2021 - 2022 Valerie Swanson, MPH
- 2021 - 2022 Kaitlin E. Buck, MPH
- 2022 - 2023 Aisha Alkandari, MPH
- 2023 - 2024 Allison Cubbon, MPH; Cyrus Gidfar, MPH

**MS Thesis mentorship:**

Colorado School of Public Health

- 2022-2024 Jonathan VanHawkins, MS

University of Michigan School of Public Health:

- 2015 - 2017 Maymona Al-Hinai, MS
- 2016 - 2018 Molly Mulcahy, MS

**PhD and MD mentorship:**

- 2013 - 2014 Jessica R. Walter, MD, Medical student at Harvard Medical School, 2013-2014  
*Role:* Research mentor on project “Timing of gestational weight gain and long-term metabolic risk in Project Viva.”
- 2020 - Present Teresa Buckner, PhD candidate at the Colorado School of Public Health, Department of Epidemiology  
*Role:* Dissertation committee member
- 2020 - Present William Patterson, PhD candidate at University of Colorado Boulder, Department of Integrated Physiology  
*Role:* Dissertation committee member and F31 mentorship team member
- 2019 - 2022 Satvinder Dhaliwal, PhD, at the Colorado School of Public Health, Department of Epidemiology

- 2022 – Present     *Role:* Primary mentor, TL1 fellowship mentor  
Leslie Barnard, DrPH candidate at the Colorado School of Public Health, Department of Epidemiology
- 2022 – Present     *Role:* Dissertation committee member  
Alyssa Beck, PhD candidate at the Colorado School of Public Health, Department of Epidemiology
- 2022 – Present     *Role:* Dissertation committee chair  
Kylie Harrall, PhD candidate at the Colorado School of Public Health, Department of Epidemiology
- 2023 – Present     *Role:* Dissertation committee chair  
Dorah Labatte, DrPH candidate at the Colorado School of Public Health, Department of Epidemiology
- Role:* Primary mentor

**Postdoctoral mentorship:**

University of Michigan:

- 2016 - 2018     Lindsay Ellsworth, MD, Pediatric endocrinology fellow at University of Michigan Medical School  
                          *Role:* Scholarship Oversight Committee member and research mentor on project, “*Infant metabolism and gestational endocrinopathies study*”

Colorado School of Public Health:

- 2019 - Present     Ellen C. Francis, PhD, Postdoctoral fellow, LEAD Center and Epidemiology  
                          *Role:* K99/R00 Primary Mentor “*Characterizing metabolic variability during pregnancy to understand pathways of in-utero overnutrition: an integrative analysis of metabolomics and lifestyle data*” (funded February 2022); formerly primary mentor on the T32 Perinatal Biology fellowship 2019 – 2022
- 2020 - Present     Catherine C. Cohen, PhD, Postdoctoral fellow, LEAD Center and Epidemiology  
                          *Role:* *Ad hoc* mentor on specific research projects

Harvard Medical School:

- 2019 - 2022     Diana C. Soria, PhD, Department of Population Medicine, Harvard Medical School  
                          *Role:* Primary mentor

**Independent thesis examiner:**

Western Sydney University:

- 2022             Jane Estrella, PhD candidate, School of Medicine, Macarthur Clinical School, Western Sydney University, Sydney, New South Wales, Australia  
                          *Role:* Independent thesis examiner for doctoral dissertation on use of neonatal dried blood spots for newborn metabolic screening.

**10. RESEARCH RECORD**

**Active:**

UG3OD035507 (PI: Bekelman, Perng, and Dabelea)

\$11,316,276

NIH/OD

09/01/2023 – 08/31/2030

**Environmental Influences on Child Health Outcomes – the Colorado ECHO Pediatric Cohort**

This project will identify early-life patterns of structural, physical, and chemical exposures during



pregnancy and early childhood that predict a clustering of health outcomes through adolescence.

Role: MPI

R01HL1281570 (PI: Belfort and Perng)

\$4,240,756

NIH/NICHD

07/01/2023 – 06/30/2028

**Infant diet and cardiometabolic risk among children born preterm.**

This project seeks to assess the metabolic consequences of a targeted protein and energy fortification of human milk vs. standard diet during the neonatal hospitalization period among infants born before 32 gestational weeks.

Role: MPI, subcontract PI

U01 DK134981 (PI: Dabelea and Perng)

\$3,887,146

NIH/NIDDK

12/01/2022 – 11/31/2027

**Understanding the Pathophysiology of Type 2 Diabetes in Navajo youth.**

This project will recruit 400 high-risk American Indian youth into a nation-wide consortium to study the pathophysiology of youth-onset type 2 diabetes.

Role: MPI

ADA-7-22-ICTSPM-08 (PI: Perng)

\$598,419

American Diabetes Association

07/01/2022 – 06/30/2025

**A multi-‘omics approach to identifying youth and young adults at high risk of early-onset type 2 diabetes**

This project seeks to characterize glucose and insulin trajectories from childhood through young adulthood, and develop novel multi-‘omics prediction algorithms for early-onset type 2 diabetes.

Role: PI

AB Nexus (PI: Perng and Alderete)

\$50,000

AB Nexus Program

12/1/2022-11/30-2023

**Role of the gut microbiota in the pathogenesis of early-onset type 2 diabetes**

This proposal will characterize the gut microbiota in 300 young-adults to study its involvement in the pathogenesis of type 2 diabetes.

Role: Contact PI

R01HD096032 PI: Oken and Chavarro)

\$2,434,201

NIH/NICHD

07/10/2019 – 04/30/2024

**A lifecourse approach to women's cardiometabolic and bone health: from fertility to perimenopause**

This proposal investigates associations of subfertility with body composition, cardiometabolic, and bone health during the perimenopausal transition across 15 years of follow-up.

Role: Co-I, Subcontract PI

***Pending:***

U01DK013212 (MPIs: Kechris, Lange, Perng, Yang)

\$7,691,625

NIH/NIDDK

7/1/2024-6/30/2029

**Subtyping Core for Research on the Etiology of Type 2 Diabetes (SCORE-T2D).**

This project seeks to capitalize on the pre-existing infrastructure for multi-site analysis and study coordination at the University of Colorado Anschutz Medical Campus, the investigative team will establish the Subtyping Core for Research on the Etiology of Type 2 Diabetes (SCORE-T2D) biostatistics research center. SCORE-T2D will work with the Cohort Sites and NIDDK to employ multi-level, multi-dimensional approaches to characterize heterogeneity in type 2 diabetes in the Consortium. Establishment of SCORE-T2D and completion of the proposed goals will result in a broadly applicable framework for identifying type 2 diabetes subtypes and forge new research opportunities for effective precision interventions to

prevent, reroute the clinical course, and optimize long-term prognosis of type 2 diabetes in diverse populations.

Role: MPI

2R01HD096032 (MPIs: Oken and Chavarro]

\$4,968,484

NIH/NICHD

5/1/2024-4/30/2029

**Fertility and women's health trajectories through the menopausal transition: a life course approach .**

In this renewal application, we propose to test our overall hypotheses that impaired fertility and ovarian hormone levels during the reproductive years predict adverse health trajectories that are exacerbated or made evident during and after the menopausal transition, and that these diverging health trajectories are modifiable by healthful lifestyle behaviors.

Role: Co-I; subcontract PI

R21HL160629 (MPIs: Perng and Aris]

\$269,532

NIH/NHLBI

07/01/2024 – 06/30/2026

**The early-life neighborhood environment and cardiovascular health from infancy through adolescence in three U.S. pediatric cohorts.**

The objective of this project is to characterize cardiovascular trajectories from infancy through the adolescent transition and characterize the interplay between social and biological risk factors in maintenance of cardiovascular health among diverse youth.

Role: MPI (contact)

R01DK132042 (PI: Hu ,Perng, Staiano)

\$3,734,202

NIH/NIDDK

08/01/2023 – 07/31/2028

**GETHealthy Obesity Prevention: Exploring the effect of essential and non-essential metal mixtures and the epigenome on metabolic health across early life.**

This project seeks to investigate associations of exposure to toxic and nutritious minerals during the prenatal period and early childhood on epigenome-wide DNA methylation patterns and development of obesity among youth in four pediatric cohorts.

Role: MPI, subcontract PI

**Completed:**

U2COD023375 (PI: Smith)

\$82,620

Duke University

09/01/21 – 08/31/23

**ECHO OIF Cycle 5: Neighborhood opportunities and disparities in child health outcomes: a nationwide U.S. multi-cohort study**

The main objective is to examine the extent to which neighborhood environments could contribute to health inequalities in children.

Role: Co-I

K99 HD108272-01 (PI: Francis)

\$185,115

NIH/NICHD

02/01/2022 – 01/31/2024

**Characterizing metabolic variability during pregnancy to understand pathways of in-utero overnutrition: an integrative analysis of metabolomics and lifestyle data**

This pathway to independence award seeks to identify distinct maternal metabolic phenotypes during pregnancy and identify molecular pathways underlying developmental overnutrition in offspring.

Role: Primary mentor

R01HD034568 (PI: Oken)

\$3,624,198

NIH/NICHD 02/01/2017 – 01/31/2023

**Pre- and peri-natal predictors of childhood obesity**

The objective of this award is to continue collecting anthropometric, metabolic, psychosocial, neurocognitive, and dietary characteristics among offspring in Project Viva through late adolescence.

Role: Subcontract PI

KL2-TR002534 (PI: Perng) \$442,417

Colorado Clinical and Translational Sciences Institute 02/01/20 – 01/30/23

**Biomarkers and mechanisms of NAFLD and T2D pathogenesis in two adolescent cohorts**

The project aims to gain insight into shared mechanistic pathways of NAFLD and type 2 diabetes using endotoxin biomarkers and metabolomics.

Role: PI

Child Health Exposure Analysis Resource (CHEAR) Grant (PI: Perng) N/A (award covers assay costs)  
Project 2016-1431

**Metabolic consequences of in utero and peripubertal toxicant-diet exposures**

This project examined associations of toxicant mixtures during gestation, early adolescence, and late adolescence with metabolic risk factors across adolescence.

Role: PI

R24ES028502 (MPIs: Peterson, Song) \$1,684,369

NIH/NIEHS 09/30/2017 – 12/30/2018

**E3Gen: Multigenerational effects of toxicant exposures on life course health and neurocognitive outcomes in the ELEMENT birth cohorts.**

This award supports cohort infrastructure and continued data collection of mothers and their children, and to enroll the third generation of the ELEMENT cohorts.

Role: Co-I (*\*Due to an institution change, I became a consultant for 7/1/2018 – 8/31/2022*)

1UG3OD023251-01 (PI: Alshwabkeh A) \$1,240,428

NIH 09/21/2016 – 08/31/2018

**Environmental Influences on Child Health Outcomes in Puerto Rico (ECHO-PRO)**

ECHO-PRO will study the impact of environmental pollutants and modifying factors on birth outcomes, obesity, neurodevelopment, and respiratory development in an underserved population.

Role: Co-I

Michigan Center for Diabetes Translational Research Pilot & Feasibility Grant \$20,000

NIH 2P30-DK020572 02/01/2016 – 06/31/2017

**Title: A prospective study of metabolomic profiles and glycemia in U.S. and Mexican children**

The objective of this proposal is to identify and characterize metabolite clusters associated with development of insulin resistance during the pubertal transition.

Role: PI

Michigan Nutrition Obesity Research Center Pilot & Feasibility Grant \$25,000

NIH P30 DK089503 MNORC 09/02/2015 – 08/31/2016

**Title: Metabolomic profiles and development of metabolic risk in U.S. and Mexican children**

The objective of this proposal is to identify and characterize metabolite clusters associated with development of metabolic syndrome components during the pubertal transition.

Role: PI

Michigan Institute for Clinical & Health Research Pilot & Feasibility Grant \$25,000  
UL1TR000433 9/02/2015 – 08/31/2016

**Title: Metabolomic profiles and development of metabolic risk in U.S. and Mexican children**

The objective of this proposal is to identify and characterize metabolite clusters associated with development of metabolic syndrome components during the pubertal transition.

Role: PI

The Michigan Life Stage Environmental Exposures and Disease Pilot Program \$5,000  
P30 M-LEEd (PI: Peterson) 01/01/16 – 03/31/16

**Title: Are Sex Differences in Effects of Early Obesogen Exposures on Metabolic Outcomes in Adolescence Mediated by Genome-wide DNA Methylation?**

The objectives are identify differentially methylated regions of the genome and metabolite profiles during peripuberty following prenatal exposure to metals.

Role: Co-I

## 11. BIBLIOGRAPHY

### Papers published in peer-reviewed journal articles

\* Denotes student or mentee whom I either directly mentored or provided substantial feedback in the planning and implementation of the paper

± Denotes co-first authorship or co-senior authorship

#### Original research papers:

1. Dombkowski KJ, Lamarand K, Dong S, **Perng W**, Clark SJ. Using Medicaid claims to identify children with asthma. *Journal of Public Health Management and Practice* 2012; 18(3):196-203. PMID: 22473110.
2. **Perng W**, Cnattingius S, Iliadou A, Villamor E. Perinatal characteristics and risk of polio among Swedish twins. *Perinatal and Paediatric Epidemiology* 2012; 26(3): 218-225. PMID: 22471681.
3. **Perng W**, Rozek L, Mora-Plazas M, Duchin O, Marin C, Forero Y, Baylin A, Villamor E. Micronutrient status and global DNA methylation in school-age children. *Epigenetics* 2012; 7(10):1133-1141. PMID: 22918385.
4. **Perng W**, Mora-Plazas M, Marin C, Villamor E. Higher iron status is related to slower linear growth in iron-replete school-age children. *European Journal of Clinical Nutrition* 2013; 67(6):646-651. PMID: 23462945.
5. Shroff M, **Perng W**, Baylin A, Mora-Plazas M, Marin, C, Villamor E. Adherence to a snacking dietary pattern and soda intake are related to the development of adiposity in school-age children. *Public Health Nutrition* 2013; 24:1-7. PMID: 23701749.
6. **Perng W**, Mora-Plazas M, Marin C, Rozek LS, Baylin A, Villamor E. A prospective study of LINE-1 DNA methylation and development of adiposity in school-age children. *PLoS One* 2013; 8(4):e62587. PMID: 23638120.
7. Perng P\*, **Perng W**, Ngoma T, Kahesa C, Mwaislage J, Merajver SD, Soliman AS. Promoters and barriers to cervical cancer screening in a rural setting in Tanzania. *International Journal of Gynaecology and Obstetrics* 2013; 123(3):221-225. PMID: 24095307.
8. Tsai E\*, **Perng W**, Baylin A, Harlow SD, Mora-Plazas M, Marin C, Villamor E. Accuracy of self-reported weight and height among women in Bogota, Colombia. *Annals of Human Biology* 2014; 41(5):473-641(5): 473-476. PMID: 24274686.
9. **Perng W**, Villamor E, Shroff M, Pilsner JR, Liu Y, Diez-Roux, AV. Methyl-donor nutrient intake, total plasma homocysteine and global DNA methylation: the Multi-Ethnic Study of Atherosclerosis. *Nutrition, Metabolism, and Cardiovascular Disease* 2014; 24(6):614-622. PMID: 24477006.
10. Walter JR\*, **Perng W**, Kleinman KP, Rich-Edwards JW, Oken E. Early gestational weight gain is associated with weight change, waist circumference, and systolic blood pressure in a large cohort. *American Journal of Obstetrics & Gynecology* 2014; 212(4):499.e1-12. PMID: 25446696.

11. **Perng W**, Rifas-Shiman SL, Rich-Edwards JW, Stuebe A, Oken E. Inflammation and weight gain in reproductive-aged women. *Annals of Human Biology* 2014; 43(1):91-95. PMID: 25510294.
12. **Perng W**, Gillman MW, Mantzoros CS, Oken E. A prospective study of maternal prenatal weight and offspring cardiometabolic health in mid-childhood. *Annals of Epidemiology* 2014; 24(11):793-800. PMID: 25263237.
13. **Perng W**, Gillman MW, Fleisch AF, Michalek R, Watkins SM, Isganiatis E, Patti ME, Oken E. Metabolomic profiles and childhood obesity. *Obesity (Silver Spring)* 2015; 22(12):2570-2578. PMID: 25251340.
14. **Perng W**<sup>‡</sup>, Laubach Z<sup>‡</sup>, Lombardo M, Murdock C, and Foufopoulos J. Determinants of parental care in Mountain white-crowned sparrows (*Zonotrichia leucophrys oriantha*). *The Auk* 2015; 132(4):893-902.
15. **Perng W**, Villamor E, Marin C, Mora-Plazas M, Baylin A. Alpha-linolenic acid (ALA) is inversely related to development of adiposity in Colombian schoolchildren. *European Journal of Clinical Nutrition* 2015; 69(2):167-172. PMID: 25271016.
16. **Perng W**, Stuart J, Rifas-Shiman SL, Stuebe A, Rich-Edwards JW, Oken E. Preterm birth and long-term maternal cardiovascular health. *Annals of Epidemiology* 2015; 25(1):40-45. PMID: 25459086.
17. Baylin A, **Perng W**, Mora-Plazas M, Marin C, and Villamor E. Serum *trans* fatty acids are not associated with weight gain or linear growth in school-age children. *Journal of Nutrition* 2015; 145(9):2102-2108. PMID: 26180252.
18. Fleisch A, Gibson H, **Perng W**, Rifas-Shiman SL, Coull BA, Kloog I, Koutrakis P, Schwartz JD, Zanobetti A, Mantzoros CS, Gillman MW, Gould DR, and Oken E. Prenatal and early life exposure to traffic pollution and cardiometabolic health in childhood. *Pediatric Obesity* 2016; 12(1):48-57. PMID: 26843357.
19. Gaillard R, Rifas-Shiman SL, **Perng W**, Oken E, and Gillman MW. Maternal inflammation during pregnancy and childhood adiposity. *Obesity (Silver Spring)* 2016; 24(6):1320-7. PMID: 27094573.
20. **Perng W**, Rifas-Shiman SL, Kramer MS, Haugaard LK, Oken E, Gillman MW, and Belfort MB. Early weight gain, linear growth, and mid-childhood blood pressure: A prospective study in Project Viva. *Hypertension* 2016; 67 (2):301-308. PMID: 26644238.
21. **Perng W**<sup>‡</sup>, Hajj H<sup>‡</sup>, Belfort MB, Rifas-Shiman SL, Kramer MS, Gillman MW, and Oken E. Birth size, early childhood weight gain, and mid-childhood cardiometabolic health. *Journal of Pediatrics* 2016; 173:122-130.e1. PMID: 26995700.
22. Haugaard LK, Baker JL, **Perng W**, Belfort MB, Rifas-Shiman SL, Switkowski K, Oken E, Gillman MW. Growth in total height and its components and cardiometabolic health in childhood. *PLoS One* 2016; 11(9):e0163564. PMID: 27658308.
23. **Perng W**, Oken E, Roumeliotaki T, Sood D, Siskos AP, Chalkiadaki G, Dermitzaki E, Vafeiadi M, Kyrtopoulos S, Kogevinas M, Keun HC, Chatzi L. Leptin, acylcarnitine metabolites, and development of adiposity in the Rhea Cohort. *Obesity Science and Practice* 2016; 2(4):471-476. PMID: 28090353.
24. **Perng W**, Watkins DJ, Cantoral A, Mercado-Garcia A, Meeker J, Tellez-Rojo M, Peterson KE. Relations of in utero and concurrent BPA and phthalate exposure with lipid profile among peripubertal Mexican youth. *Environmental Research* 2017; 154:311-317. PMID: 28152472
25. **Perng W**, Ringham B, Glueck DH, Sauder KAS, Starling AP, Belfort MB, Dabelea D. An observational cohort study of weight- and length-derived anthropometric indicators with body composition at birth and 5 months: The Healthy Start Study. *American Journal of Clinical Nutrition* 2017; 106(2):559-567. PMID: 28659296.
26. **Perng W**, Rifas-Shiman SL, McCulloch S, Chatzi L, Mantzoros C, Hivert MF, Oken E. Associations of cord blood metabolites with perinatal characteristics, newborn anthropometry, and cord blood hormones in Project Viva. *Metabolism Clinical and Experimental* 2017; 76:11-22. PMID: 28987236.
27. **Perng W**, Hector EC, Song PXX, Tellez Rojo MM, Raskind S, Kachman M, Cantoral A, Burant BF, Peterson KE. Metabolomic determinants of metabolic risk in Mexican adolescents. *Obesity (Silver Spring)* 2017; 25(9):1594-1602. PMID: 28758362.
28. **Perng W**, Fernandez C, Peterson KE, Zhang ZZ, Cantoral A, Sanchez BN, Solano-Gonzalez M, Tellez-Rojo MM, Baylin A. A prudent dietary pattern is protective against metabolic syndrome risk factors in urban Mexican adolescents. *Journal of Nutrition* 2017; 147(10):1977-1985. PMID: 28855420.

29. Fulay A\*, Rifas-Shiman SL, Oken E, **Perng W**. Associations of the Dietary Approaches To Stop Hypertension (DASH) Diet with Pregnancy Complications in Project Viva. *European Journal of Clinical Nutrition* 2018; 72(10): 1385-1395. PMID: 29339829
30. Bell KA, Wagner CL, **Perng W**, Feldman HA, Shypailo RJ, Belfort MB. Validity of body mass index as a measure of adiposity in infancy. *Journal of Pediatrics* 2018; 196:168-174. PMID: 29551311.
31. **Perng W**, Rifas-Shiman SL, Hivert MF, Chavarro JE, Oken E. Branched chain amino acids, androgen hormones, and metabolic risk across early adolescence: a prospective study in Project Viva. *Obesity (Silver Spring)* 2018; 26(5):916-926. PMID: 29575812.
32. Al-Hinai M\*, Baylin A, Tellez-Rojo M, Cantoral A, Ettinger A, Solano-Gonzalez M, Peterson KE, **Perng W**. Maternal Intake of Omega-3 and Omega-6 Polyunsaturated Fatty Acids During Mid-Pregnancy is Inversely Associated with Linear Growth. *Journal of Developmental Origins of Health and Disease* 2018; 9(4):432-441. PMID: 29665872.
33. Kelly R, Sordillo J, Lasky-Su J, Dahlin A, **Perng W**, Rifas-Shiman S, Weiss S, Gold D, Litonjua A, Hivert MF, Oken E, Wu A. Plasma metabolite profiles in children with current asthma. *Clinical & Experimental Allergy* 2018; 48(10): 1297-1304. PMID: 29808611.
34. Jansen E, Zhou L, **Perng W**, Song P XK, Tellez-Rojo MM, Mercado A, Peterson KE, Cantoral A. Vegetable and lean proteins-based and processed meat and refined grains pattern-based dietary patterns in early childhood are associated with pubertal timing in a sex-specific manner: a prospective study of children from Mexico City. *Nutrition Research* 2018; 56:41-50. PMID: 30055773
35. **Perng W**, Baek J, Zhou CW, Cantoral A, Tellez-Rojo MM, Song P XK, Peterson KE. Associations of the infancy body mass index peak with anthropometry and cardiometabolic risk in Mexican adolescents. *Annals of Human Biology* 2018; 45(5):386-394. PMID: 30328713
36. **Perng W**, Talge NM, Holzman C, Senagore PK. Placental pathology, corticotropin-releasing hormone, timing of parturition, and fetal growth in the Pregnancy Outcomes and Community Health Study. *Journal of Maternal-Fetal & Neonatal Medicine* 2018; 33(7):1225-1232. PMID: 30157679.
37. **Perng W**, Tang L, Song P XK, Martha Mara Tellez-Rojo, Alejandra Cantoral, and Karen E. Peterson. Metabolomic profiles and development of metabolic risk during the pubertal transition: A prospective study in the ELEMENT Project. *Pediatric Research* 2018; 85(3):262-268. PMID: 30297880.
38. **Perng W**, Tang L, Song P XK, Goran M, Tellez-Rojo MM, Cantoral A, and Peterson KE. Urate and nonanoate mark the relationship between sugar-sweetened beverage intake and blood pressure in adolescent girls: A metabolomics analysis in the ELEMENT Cohort. *Metabolites* 2019; 9(5):100. PMID: 31108933.
39. Playdon MC, Joshi AD, Tabung FK, Cheng S, Henglin M, Kim A, Lin T, van Roekel EH, Huang J, Krumsiek J, Wang Y, Mathe E, Temprosa M, Moore S, Chawes B, Eliassen H, Gsur A, Gunter MJ, Harada Sei, Lagenberg C, Oresic M, **Perng W**, Seow WJ, Zeleznik OA. Metabolomics analytics workflow for epidemiological research: perspectives from the Consortium of Metabolomics Studies (COMETS). *Metabolites* 2019. 9(7):145. PMID: 31319517.
40. **Perng W**, Rifas-Shiman SL, Hivert MF, Chavarro JE, Sordillo J, and Oken E. Metabolic trajectories across early adolescence: differences by sex, weight, pubertal status, and race/ethnicity. *Annals of Human Biology* 2019; 46(3):205-214. PMID: 31264447.
41. **Perng W**<sup>‡</sup>, Laubach Z<sup>‡</sup>, Cardenas A, Rifas-Shiman SL, Oken E, DeMeo D, Litonjua AA, Duca R-C, Godderis L, Baccarelli A, and Hivert MF. Socioeconomic status and DNA methylation from birth through mid-childhood: a prospective study in Project Viva. *Epigenomics* 2019; 11(12):1413-1427. PMID: 31509016
42. Hockett CW, Harrall R, Moore B, Starling A, Bellatorre A, Sauder K, **Perng W**, Scherzinger A, Ringham B, Glueck D, Dabelea D. Persistent effects of *in utero* overnutrition on offspring adiposity: the EPOCH study. *Diabetologia* 2019; 62(11):2017-2024. PMID: 31444527
43. **Perng W**, Tamayo-Ortiz M, Tang L, Sanchez BN, Cantoral A, Meeker JD, Dolinoy DC, Foberts EFS, Martinez-Mier EA, Lamadrid-Figueroa H, Song P XK, Ettinger AS, Wright R, Arora M, Schnaas L, Watkins DJ, Goodrich JG, Lee RC, Solano-Gonzalez M, Bautista-Arredondo LF, Mercado-Garcia A, Hu H, Hernandez-Avila M, Tellez-Rojo MM, and Peterson KE. Cohort Profile Paper: The Early Life Exposure in

- Mexico to Environmental Toxicants (ELEMENT) Project. *BMJ Open* 2019; 9(8):e030427. PMID: 31455712.
44. **Perng W**, Rifas-Shiman SL, Sordillo J, Hivert MF, and Oken E. Metabolomic profiles of overweight/obesity phenotypes during adolescence: A cross-sectional study in Project Viva. *Obesity (Silver Spring)* 2019; 28(2):379-387. PMID: 31876390.
  45. **Perng W**, Ringham BM, Smith HA, Michelotti G, Kechris KM, and Dabelea D. A prospective study of *in utero* exposure to gestational diabetes mellitus (GDM) with metabolomics profiles during late childhood and adolescence. *Diabetologia* 2019. 63(2): 296-312. PMID: 31720734.
  46. **Perng W**, Hockett CW, Sauder KA, and Dabelea D. In utero exposure to gestational diabetes mellitus (GDM) and cardiovascular risk factors in youth: A longitudinal analysis in the EPOCH cohort. *Pediatric Obesity* 2019; 15(5):e12611. PMID: 31920001.
  47. Stanislawski MA, Shaw J, Litkowski E, Lange EM, **Perng W**, Dabelea D, Lange LA. Genetic risk for hepatic steatosis among an ethnically diverse cohort of youth: the EPOCH study. *Journal of Pediatrics* 2020; 220:146-153.e2. PMID: 32143931.
  48. **Perng W**, Kasper NM, Watkins DJ, Sanchez BN, Meeker JD, Cantoral A, Solano-Gonzalez M, Tellez-Rojo MM, and Peterson KE. Exposure to endocrine-disrupting chemicals during pregnancy is associated with weight change through one year postpartum among women in the ELEMENT Project. *Journal of Women's Health* 2020; 29(11):1419-1426. PMID: 32233978.
  49. Ellsworth L\*, **Perng W**, Harman E, Das A, Pennathur S, Gregg B. Impact of maternal overweight and obesity on human milk composition and infant growth. *Maternal & Child Nutrition* 2020; 16(3):e12979. PMID: 32074402.
  50. Cantoral A, Montoya A, Luna-Villa L, Roldan-Valadez EA, Hernandez-Avila M, Kershenovich D, **Perng W**, Peterson KE, Hu H, Rivera JA, Tellez-Rojo MM. Non-alcoholic fatty liver disease in young adults and its association with overweight and obesity status from the prenatal period to adolescence. *British Journal of Obstetrics & Gynecology* 2020; 127(10):1200-1209. PMID: 32145139.
  51. Soria-Contreras DC, Rifas-Shiman SL, Aris IM, **Perng W**, Switkowski KM, Téllez-Rojo MM, Trejo-Valdivia B, López-Ridaura R, Oken. E. Weight trajectories after delivery are associated with adiposity and cardiometabolic markers at 3 years postpartum among women in Project Viva. *J Nutr* 2020; 150(7):1889-1898. PMID: 32321175.
  52. LaBarre JL\*, Peterson KE, Kachman MT, **Perng W**, Tang L, Hao W, Zhou L, Karnovsky A, Cantoral A, Tellez-Rojo MM, Song PJK, Burant CF. Mitochondrial nutrient utilization underlying the association between metabolites and insulin resistance in adolescents. *Journal of Clinical Endocrinology & Metabolism* 2020; 105(7):2242-2455. PMID: 32413135,
  53. Harville E, Bazano L, Qi L, He J, Dorans K, **Perng W**, and Kelly T. Branched chain amino acids, history of gestational diabetes, and breastfeeding: The Bogalusa Heart Study. *Nutrition, Metabolism, and Cardiovascular Disease* 2020; S0939-4753(20)30244-1. PMID: 32819784.
  54. Rygiel CA, Goodrich JM, **Perng W**, Jones TR, Solano M, Hu H, Tellez-Rojo MM, Peterson KE, Dolinoy DC. Trimester-specific associations of prenatal lead (Pb) exposure with infant cord blood DNA methylation at birth. *Epigenetic Insights* 2020; 13: 2516865720938669. PMID: 32734142.
  55. Buxton MA\*, **Perng W**, Tellez-Rojo MM, Rodriguez-Carmona Y, Cantoral A, Sanchez BN, Rivera-Gonzalez LO, Gronlund CJ, Chivappa N, Hebert JR, O'Neill MS, Peterson KE. Particulate matter exposure, dietary inflammatory index and preterm birth in Mexico City. *Environmental Research* 2020; 189:109852. PMID: 32979989.
  56. **Perng W**, Francis EC, Smith HA, Carey J, Wang D, Kechris K, and Dabelea D. Sex-specific metabolite biomarkers of NAFLD in youth: a prospective study in the EPOCH cohort. *Journal of Clinical Endocrinology and Metabolism* 2020; 105(9):e3437-e3450. PMID: 32687159.
  57. **Perng W**, Rahman M, Aris IM, Michelotti G, Sordillo JE, Chavarro JE, Oken E, Hivert MF. Metabolite profiles of the relationship between body mass index (BMI) milestones and metabolic risk during early adolescence. *Metabolites* 2020; 10(8):315. PMID: 32751947.

58. Betanzos-Robledo L, Carmona-Rodriguez Y, Contreras-Mazano A, Lamadrid-Figueroa H, Jansen E, Tellez-Rojo M, **Perng W**, Peterson KE, Hebert JR, Cantoral-Preciado A. Dietary inflammatory index and its relationship with metabolic syndrome score and blood pressure in young Mexican adults. *Nutrition Research* 2020; 81:81-89 PMID: 32942060.
59. Francis EC\*, Dabelea D, Ringham BM, Sauder KA, and **Perng W**. Maternal glycemia and offspring glucose-insulin homeostasis: what is the role of offspring adiposity? *Diabetologia* 2020; doi: 10.1007/s00125-020-05294-2. PMID: 33021691.
60. Hu J, Aris IM, Lin PD, Rifas-Shiman SL, **Perng W**, Woo-Baidal JA, Wen D, and Oken E. Longitudinal associations of modifiable risk factors in the first 1000 days with weight status and metabolic risk in early adolescence. *American Journal of Clinical Nutrition* 2020; 113(1):113-122. PMID: 33184628.
61. **Perng W**, Harte R, Ringham BM, Baylin A, Bellatorre A, Scherzinger A, Goran MI, and Dabelea D. A prudent dietary pattern is inversely associated with liver fat content among multi-ethnic youth. *Pediatric Obesity* 2020; e12758. PMID: 33296951.
62. Mitro SD, Liu J, Jaacks JM, Fleisch AF, Williams PL, Knowler WC, Laferrere B, **Perng W**, Bray GA, Wallia A, Hivert MF, Oken E, James-Todd TM, Temprosa M. Per- and polyfluoroalkyl substance plasma concentrations and metabolomics markers of type 2 diabetes in the Diabetes Prevention Program trial. *International Journal of Hygiene and Environmental Health* 2021; 232:113680. PMID: 33348273.
63. Faleschini S, Rifas-Shiman SL, Monthe-Dreze C, Switkowski KM, Gingras V, **Perng W**, Oken E, Tiemeier H, Hivert MF. Maternal dietary inflammatory index in pregnancy and offspring behavioral problems in mid-childhood and early-adolescence. *Biological Psychiatry* 2021; S0006-3223(21)00088-3. PMID: 33824005.
64. Sauder KA, **Perng W**, Palumbo MP, Bloemsma LD, Carey J, Glueck DH, Dabelea D. Fat mass accretion from birth to 5 years and metabolic homeostasis in childhood: The Healthy Start Study. *Journal of Clinical Endocrinology Metabolism* 2021; 106(6):1684-1691. PMID: 33616653.
65. Betanzos-Robledo L, Cantoral A, Peterson K, Hu H, Hernández-Ávila M, **Perng W**, Jansen E, Ettinger AS, Mercado-García A, Solano-González M, Sánchez B, Téllez-Rojo MM. Association between cumulative childhood blood lead exposure and hepatic steatosis in young Mexican adults. *Environmental Research* 2021; 196:110980. PMID: 33691159.
66. **Perng W**, Francis EC, Schuldt C, Barbosa G, Dabelea D, and Sauder KA. Pre- and perinatal correlates of ideal cardiovascular health (ICVH) during early childhood: a prospective analysis in the Healthy Start Study. *Journal of Pediatrics* 2021; 234:187-194. PMID: 33741366.
67. **Perng W**, Kelsey MM, Sauder KA, Dabelea D. How does overnutrition *in utero* lead to development of adiposity? Testing the insulin hypersecretion hypothesis in the EPOCH cohort. *Diabetologia* 2021; 64(10):2237-2246. PMID: 34272965.
68. Gering E, Laubach Z, Weber P, Hussey G, Lehmann K, Montgomery T, Turner J, **Perng W**, Pioon M, Holekamp KE, and Getty T. Toxoplasma gondii infections are associated with costly boldness toward felids in a wild host. *Nature Communications* 2021; 12:3842. PMID: 34158487.
69. Laubach ZM, Greenberg JR, Turner JW, Montgomery TM, Pioon MO, Sawdy MA, Smale L, Cavalcante RG, Padmanabhan KR, Lalancette C, vonHoldt B, Faulk CD, Dolinoy DC, Holekamp KE, **Perng W**. Early-life social experience affects offspring DNA methylation and later life stress phenotype. *Nature Communications* 2021; 12: 4398. PMID: 34285226.
70. Francis EC\*, Dabelea D, Shankar K, and **Perng W**. Maternal diet quality during pregnancy is associated with biomarkers of metabolic risk among male offspring. *Diabetologia* 2021; 64(11):2478-2490. PMID: 34370046.
71. Cohen CC\*, **Perng W**, Sundaram SS, Scherzinger A, Shankar K, and Dabelea D. Hepatic fat in early childhood is independently associated with estimated insulin resistance: The Healthy Start Study. *Journal of Clinical Endocrinology and Metabolism* 2021; 106(11):3140-3150. PMID: 34289064
72. Jansen E, Corcoran K, **Perng W**, Dunietz GL, Cantoral A, Zhou L, Tellez-Rojo MM, and Peterson KE. Adolescent beverage intake in relation to actigraphy-assessed sleep duration, timing, and fragmentation. *Public Health Nutr* 2021. doi: 10.1017/S136898002100313X. PMID: 34325765



73. Cohen CC\*, **Perng W**, Bekelman T, Ringham B, Scherzinger A, Shankar K, and Dabelea D. Childhood nutrient intakes are differentially associated with hepatic and abdominal fats in adolescence: The EPOCH Study. *Obesity (Silver Spring)* 2021; 30(2):460-471. PMID: 35088559.
74. Cohen CC\*, **Perng W**, Sauder KA, Ringham BM, Bellatorre A, Scherzinger A, Stanislawski MA, Lange LA, Shankar K, and Dabelea D. Associations of nutrient intake changes during childhood with adolescent hepatic fat: The Exploring Perinatal Outcomes among Children Study. *Journal of Pediatrics* 2021; 237:50-58.e3. PMID: 34171361.
75. Mulcahy MC\*, Tellez-Rojo MM, Cantoral A, Solano-Gonzalez M, Baylin A, Bridges D, Peterson KE, **Perng W**. Maternal carbohydrate intake during pregnancy is associated with child peripubertal markers of metabolic health but not adiposity. *Public Health Nutrition* 2021; doi: 10.1017/S1368980021004614. PMID: 34814962.
76. Francis EC\*, Dabelea D, Boyle KE, Jansson T, and **Perng W**. Maternal diet quality is associated with placental proteins from insulin, insulin growth factor, environmental stress, inflammation, and mTOR signaling: The Healthy Start ECHO Cohort. *Journal of Nutrition* 2021; 152(3):816-825. PMID: 34850052.
77. Rodriguez-Carmona Y, Meijer JL, Zhou Y, Jansen EC, **Perng W**, Banker M, Song PXX, Tellez-Rojo MM, Peterson KE. Metabolomics reveals sex-specific pathways associated with changes in adiposity and muscle mass in a cohort of Mexican adolescents. *Pediatric Obesity* 2022; Jan12:e12887. PMID: 35023314.
78. Aris IM, **Perng W**, Dabelea D, Ganiban J, Liu C, Marceau K, Robertson OC, Hockett CW, Mihalopoulos NL, Kong X, Herting MM, O’Shea M, Jensen ET, Hivert MF, and Oken E. Analysis of early life growth and age at pubertal onset in U.S. children. *JAMA Open Network* 2022; 5(2):e2146873. PMID: 35119461.
79. Soria-Contreras D\*, **Perng W**, Rifas-Shiman SL, Minguez-Alarcon L, Hivert MF, Shifren J, Oken E, and Chavarro JE. Menstrual cycle length and adverse pregnancy outcomes among women in Project Viva. *Paediatric and Perinatal Epidemiology* 2022; 36(3):347-355. PMID: 35172020.
80. Cohen CC, Francis EC, **Perng W**, Sauder KA, Scherzinger A, Sundaram S, Shankar K, and Dabelea D. Exposure to maternal fuels during pregnancy and offspring hepatic fat in early childhood: The Healthy Start Study. *Pediatric Obesity* 2022; e12902. PMID: 35122420.
81. **Perng W**, Friedman JE, Janssen RC, Glueck DH, and Dabelea D. Endotoxin biomarkers are associated with adiposity and cardiometabolic risk across 6 years of follow-up in youth. *Journal of Clinical Endocrinology and Metabolism* 2022;107(7):e3018-e3028. PMID: 35276001.
82. Francis EC\*, Kechris K, Cohen CC, Michelotti G, Dabelea D, and **Perng W**. Metabolomic profiles in childhood and adolescence are associated with fetal overnutrition. *Metabolites* 2022; 12, 265. PMID: 35323708.
83. Soria-Contreras D\*, **Perng W**, Rifas-Shiman SL, Minguez-Alarcon L, Hivert MF, Shifren J, and Oken D. Associations of hypertensive disorders of pregnancy and gestational diabetes mellitus with menopausal symptoms at midlife in Project Viva. *Menopause* 2022; doi: 10.1097/GME.0000000000002014. PMID: 35917550.
84. **Perng W**, Hivert MF, Michelotti G, Oken E, and Dabelea D. Metabolomic predictors of dysglycemia in two U.S. youth cohorts. *Metabolites* 2022; 12 (404). PMID: 35629908.
85. Cohen CC\*, Dabelea D, Michelotti G, Shankar K, Tang L, Goran MI, and **Perng W**. Metabolome alterations linking sugar-sweetened beverage intake with dyslipidemia in youth: the Exploring Perinatal Outcomes among Children (EPOCH) Study. *Metabolites* 2022; 23(6):559. PMID: 35736491.
86. Dhaliwal SK\*, Dabelea D, Lee-Winn AE, Glueck DH, Wilkening G, and **Perng W**. Characterization of maternal psychosocial stress during pregnancy: The Healthy Start Study. *Women’s Health Reports* 2022; 3(1):698-708. PMID: 36147836.
87. Preston EV, Hivert M-F, Fleisch AF, Calafat AM, Sagiv SK, **Perng W**, Rifas-Shiman SL, Chavarro JE, Oken E, Zota AR, James-Todd T. Early-pregnancy plasma per- and polyfluoroalkyl substance (PFAS) concentrations and hypertensive disorders of pregnancy in the Project Viva cohort. *Environmental International* 2022; 165:107335. PMID: 35696844.

88. Cohen CC, Harrall KK, Gilley S, **Perng W**, Sauder KA, Scherzinger A, Shankar K, Sundaram SS, Glueck DH, and Dabelea D. Body composition trajectories from birth to 5 years and hepatic fat in early childhood. *American Journal of Clinical Nutrition* 2022; 116(4):1010-1018. PMID: 36055960.
89. Soria-Contreras DC\*, Oken E, Tellez-Rojo MM, Rifas-Shiman SL, Chavarro JE<sup>‡</sup>, and **Perng W**<sup>‡</sup>. History of infertility and long-term weight, body composition, and blood pressure among women in Project Viva. *Annals of Epidemiology* 2022; 74:43-50. PMID: 35777630.
90. Soria-Contreras DC\*, **Perng W**, Rifas-Shiman SL, Hivert MF, Oken E, and Chavarro JE. History of infertility and pregnancy outcomes in Project Viva: a prospective study. *BMC Pregnancy and Childbirth* 2022; 22(1):549. PMID: 35799124.
91. Faleschini S, Tiemeier H, Rifas-Shiman SL, Rich-Edwards J, Joffe H, **Perng W**, Shifren J, Chavarro JE, Hivert MF, and Oken E. Longitudinal associations of psychosocial stressors with menopausal symptoms and well-being among women in midlife. *Menopause* 2022; 29(11):1247-1253. PMID: 36099555.
92. Paster IC, Lin PD, Rifas-Shiman SL, **Perng W**, Chavarro JE, and Oken E. Association of Total Lifetime Breastfeeding Duration with Midlife Hand Grip Strength: Findings from Project Viva. *BMC Women's Health* 2022; 22(1):306. PMID: 35870925.
93. Goodrich JM, Tang L, Rodriguez-Carmona Y, Meijer JL, **Perng W**, Watkins D, Meeker JD, Mercado-Garcia A, Cantoral A, Song PX, Tellez-Rojo MM, and Peterson KE. Trimester-specific phthalate exposures in pregnancy are associated with circulating metabolites in children. *PLoS One* 2022; 17(8):e027294. PMID: 36040907.
94. Qureshi F, Aris I, Rifas-Shiman SL, **Perng W**, Oken E, Rich-Edwards J, Cardenas A, Bosquet-Enlow M, Belfort MBB, and Tiemeier H. Associations between cord blood telomere length and adiposity growth from infancy to adolescence. *Pediatric Obesity* 2022; 312977. PMID: 36085441.
95. Aris IM, **Perng W**, Dabelea D, Padula AM, Alshawabkeh A, Velez-Vega CM, Aschner JL, Camargo Jr CA, Sussman TJ, Dunlop AL, Elliot AJ, Ferrara A, Zhu Y, Joseph CLM, Singh AM, Hartert T, Cacho F, Karagas MR, North-Reid T, Lester BM, Kelly NR, Ganiban JM, Chu SH, O'Connor TG, Fry RC, Norman G, Trasande L, Restrepo B, James P, and Oken E. Associations of neighborhood opportunity and vulnerability and trajectories of child body mass index and obesity: A Nationwide US Multicohort Study. *JAMA Network Open* 2022; 5(12):e2247957. PMID: 36547983.
96. Francis EC, Oken E, Hivert MF, Rifas-Shiman SL, Chavarro JE, **Perng W**. Anti-Mullerian hormone and adiposity across mid-life among women in Project Viva. *Menopause* 2023; 30(3):247-253. PMID: 36728523.
97. Fossee E, Zamora AN, Peterson KE, Cantoral A, **Perng W**, Tellez-Rojo MM, and Jansen E. Prenatal dietary patterns in relation to adolescent offspring adiposity and adipokines in a Mexico City cohort. *Journal of Developmental Origins of Health and Disease* 2023; 1-10. PMID: 36655507.
98. Gilley S, Harrall KK, Friedman C, Glueck DH, Cohen CC, **Perng W**, Sauder KA, Krebs NF, Shankar K, and Dabelea D. Association of Maternal BMI and Rapid Infant Weight Gain with Childhood Body Size and Composition. *Pediatrics* 2023; 151(5):e2022059244. PMID: 37016999.
99. Cohen CC, **Perng W**, Sauder KA, Shapiro ALB, Starling AP, Friedman C, Felix JF, Kupers LK, Moore BF, Hebert JR, Shivappa T, Scherzinger A, Sundaram SS, Shankar K, and Dabelea D. Maternal diet quality during pregnancy and offspring hepatic fat in early childhood: The Healthy Start Study. *Journal of Nutrition* 2023; S0022-3166(23): 11106-0. PMID: 36796482.
100. **Perng W**, Aris IM, Slopen N, Younoszai N, Swanson V, Mueller NT, Sauder KA, and Dabelea D. Application of Life's Essential 8 to assess cardiovascular health during early childhood. *Annals of Epidemiology* 2023; 80:16-24. PMID: 36773850.
101. Buckner T, Johnson R, Vanderlinden L, Carry P, Romero A, Onengut-Gumuscu S, Chen WM, Kim S, Feihn O, Frohnert B, Crume T, **Perng W**, Kechris K, Rewers M, and Norris J. An oxylipin-related nutrient pattern and risk of type 1 diabetes in the Diabetes Autoimmunity Study in the Young (DAISY). *Nutrients* 2023; 15(4):945. PMID: 36839302.

102. Francis EC\*, Kechris K, Jansson T, Dabelea D, and **Perng W**. Novel metabolic subtypes in pregnant women and risk of early childhood obesity in offspring: The Healthy Start Study. *JAMA Network Open* 2023;6(4):e237030.
103. Soria-Contreras DC, Aris IM, Rifas-Shiman SL, **Perng W**, Hivert MF, Chavarro JE, Oken E. Associations of age at first birth and lifetime parity with weight and adiposity across midlife in women from Project Viva. *Obesity* 2023; DOI: 10.1002/oby.23831Obesity.
104. Dhaliwal SK\*, Dabelea D, Lee-Winn AE, Crume T, Wilkening G, and **Perng W**. Maternal psychosocial stress during pregnancy and offspring neurobehavioral outcomes during early childhood in the Healthy Start Study. *Annals of Epidemiology* 2023 Jun 13;S1047-2797(23)00114. PMID: 37321280.
105. Bozack AK, Rifas-Shiman SL, Gold DR, Laubach ZM, **Perng W**, Hivert MF, and Cardenas A. DNA methylation age at birth and childhood: performance of epigenetic clocks and characteristics associated with epigenetic age acceleration in the Project Viva cohort. *Clinical Epigenetics* 2023; 15(1):52. PMID: 37046280.
106. Aris IM, **Perng W**, Dabelea D, Padula AM, Alshawabkeh A, Vélez-Vega CM, Aschner JL, Camargo Jr. CA, Sussman TJ, Dunlop AL, Elliott AJ, Ferrara A, Joseph CLM, Singh AM, Breton CV, Hartert T, Cacho F, Karagas MR, Lester BM, Kelly N, Ganiban JM, Chu SH, O'Connor TG, Fry RC, Norman G, Trasande L, Restrepo B, Gold DR, James P, Oken E. Associations of Neighborhood Opportunity and Vulnerability with Incident Asthma Among U.S. Children in the ECHO cohorts. *JAMA Peds.* 2023 July; In press.
107. Kasman M, Hammond RA, Reader L, Purcell R, Guyer S, Ganiban JM, Mitchell DC, Dabelea DM, Bellatorre A, Bekelman TA, Cohen CC, **Perng W**, Grummon AH, Wu AJ, Oken E, Kleinman K. Childhood Sugar-sweetened Beverage Consumption: An Agent-based Model of Context-specific Reduction Efforts. *Am J Prev Med* 2023. doi: <https://doi.org/10.1016/j.amepre.2023.07.004>.
108. Buck KE\*, Dhaliwal SK, Dabelea D, and **Perng W**. Association of maternal psychosocial stress with newborn body composition in the Healthy Start study. *Journal of Developmental Origins of Health and Disease* 2023; PMID: 37694587.
109. Fang F, Zhou L, **Perng W**, Marsit CJ, Knight AK, Cardenas A, Aunt MT, Hivert MF, Aris IM, Goodrich JM, Smith AK, Gaylord A, Fry RC, Oken E, O'Connor G, Ruden DM, Trasande L, Herbstman JB, Camargo CA, Bush NR, Dunlop AL, Dabelea D, Karagas MR, Breton CV, Ober C, Everson TM, Page GP, and Ladd-Acosta C. Evaluation of pediatric epigenetic clocks across multiple tissues. *Clinical Epigenetics* 2023; 15(1):142. PMID: 37660147.
110. Rifas-Shiman SL, Aris IM, Switkowski KM, Young J, Fleisch AF, James-Todd T, Zota AR, **Perng W**, Hivert MF, Rich-Edwards JW, Capotosto MP, Chavarro JE\*, Emily Oken E\*. Cohort Profile Update: Project Viva Mothers. *Int J Epidemiol* 2023; PMID: 37875013.
111. Ong YY, Rifas-Shiman SL, **Perng W**, Belfort MB, Law E, Hivert MF, Oken E, Tiemeier H, and Aris IM. Growth velocities across distinct early life windows and child cognition: insights from a contemporary U.S. cohort. *J Pediatrics* 2023; 263:113653.
112. Aljahdali AA, Cantoral A, **Perng W**, Mercado-Garcia A, Tellez-Rojo MM, Ramirez-Silva CI, Jansen EC. Breastfeeding duration and cardiometabolic health during adolescence: A longitudinal analysis. *Journal of Pediatrics* 2023; PMID: 37802388.
113. Laubach ZM, Bozack A, Aris IM, Slopen N, Tiemeier H, Hivert MF, Cardenas A, and **Perng W**. Maternal prenatal social experiences and offspring epigenetic age acceleration from birth to mid-childhood. *Annals of Epidemiology* 2023; S1047-2797(23)00192-8; PMID 37839726.
114. Agbaje A, **Perng W**, and Tuomainen T. Effects of Accelerometer-based Sedentary Time and Physical Activity on DEXA-measured Fat Mass in 6059 Children. *Nature Communications* 2023; 14(1):8232. PMID: 38086810.
115. Choudhary, P, G S Monasso, V Karhunen, J Ronkainen, G Mancano, C G Howe, Z Niu, X Zeng, W Guan, J Dou, J I Feinberg, C Mordaunt, G Pesce, N Baiz, R Alfano, D S Martens, C Wang, E Isaevska, E Keikkala, S Mustaniemi, C H L Thio, E Fraszczyk, E W Tobi, A P Starling, M Cosin-Tomas, J Urquiza, S Röder, T T Hoang, C Page, D D Jima, J S House, R L Maguire, R Ott, X Pawlow, L Sirignano, L Zillich, A Malmberg, S Rauschert, P Melton, T Gong, R Karlsson, R Fore, **Perng W**, Laubach ZM, D Czamara, G

- Sharp, C V Breton, E Schisterman, E Yeung, S L Mumford, M D Fallin, J M LaSalle, R J Schmidt, K M Bakulski, I Annesi-Maesano, B Heude, T S Nawrot, M Plusquin, A Ghantous, Z Herceg, L Nisticò, M Vafeiadi, M Kogevinas, M Vääräsmäki, E Kajantie, H Snieder, E Corpeleijn, R P M Steegers-Theunissen, I V Yang, D Dabelea, S Fossati, A C Zenclussen, G Herberth, M Magnus, S E Håberg, S J London, M C Munthe-Kaas, S K Murphy, C Hoyo, A-G Ziegler, S Hummel, S H Witt, F Streit, J Frank, K Räikkönen, J Lahti, R-c Huang, C Almqvist, M-F Hivert, V W V Jaddoe, M-R Järvelin, M Kantomaa, J F Felix and S Sebert (2023). "Maternal educational attainment in pregnancy and epigenome-wide DNA methylation changes in the offspring from birth until adolescence." *Molecular Psychiatry* 2023; <https://doi.org/10.1038/s41380-023-02331-5>
116. Cohen C, Harrall K, Hu H, Glueck DH, **Perng W**, Shankar K, and Dabelea D. Associations of infant feeding practices with abdominal and hepatic fat measures in childhood in the longitudinal Healthy Start Study. *American Journal of Clinical Nutrition* 2023; S0002-9165(23)66283-5. PMID: 38000661.
  117. **Perng W**, Salmon K, Schenker R, Janssen R, Friedman J, and Goran MI. Endotoxin biomarkers, hepatic fat fraction, liver volume, and liver stiffness among adolescents at high-risk for non-alcoholic fatty liver disease: the HEROES study. *Pediatric Obesity* 2023; e313091. PMID: 38084670.
  118. **Perng W**, Fitz VW, Salmon K, Hivert MF, Kazemi M., Rifas-Shiman SL, Shifren J, Oken E, and Chavarro JE. Prevalence and correlates of diagnosed and probable polycystic ovary syndrome (PCOS) in a cohort of parous women. *American Journal of Epidemiology* 2023; in press.

Scholarly reviews:

119. **Perng W**<sup>‡</sup>, Hivert MF<sup>‡</sup>, Watkins SM, Newgard CS, Kenny LC, Kristal BS, Patti ME, Isganaitis E, DeMeo DL, Oken E, and Gillman MW. Review: Metabolomics in the developmental origins of obesity and its cardiometabolic consequences. *Journal of Developmental Origins of Health and Disease* 2016; 6(2):65-78. PMID: 25631626.
120. McCabe C\* and **Perng W**. Metabolomics and gestational diabetes. *Current Diabetes Reports* 2017; 17(8):57. PMID: 28646358.
121. Laubach ZM, **Perng W**, Dolinoy D, Faulk CD, Holekamp KE, Getty T. Epigenetics and the maintenance of developmental plasticity: extending the signalling theory framework. *Biological Reviews* 2018; 93(3):1323-1338. PMID: 29356358.
122. **Perng W**, Oken E, Dabelea D. Developmental overnutrition and offspring obesity and type 2 diabetes. *Diabetologia* 2019; 62(10):1779-1788. PMID: 31451868.
123. Wu Y\*, **Perng W**, Peterson KE. Precision Nutrition and Childhood Obesity: A Scoping Review. *Metabolites* 2020; 10(6): 235. PMID: 32521722.
124. **Perng W** and Aslibekyan S. Find the needle in the haystack, then find it again: replication & validation in the 'omics era. *Metabolites* 2020; 10(7):286. PMID: 32664690.
125. **Perng W**, Cantoral A, Soria-Contreras DC, Betanzos-Robledo L, Kordas K, Liu Y, Mora AM, Corvalan C, Pereira A, Cardoso MA, Chavarro JE, Breton CV, Meeker JD, Harley KG, Eskenazi B, Peterson KE, Tellez-Rojo MM. Exposure to obesogenic endocrine disrupting chemicals and obesity among youth of Latino or Hispanic origin in the U.S. and Latin America: a lifecourse perspective. *Obesity Reviews* 2021; Suppl 3 (Suppl 3):e13245. PMID: 33951277.
126. Laubach ZM, Murray EJ, Hoke KL, Safran RJ, and **Perng W**. A biologist's guide to causal inference. *Proceedings of the Royal Society B* 2021; 288:2020815. PMID: 33499782.
127. **Perng W** and Dhaliwal SK. Anti-Asian racism and COVID-19: How it started, how it's going, and what we can do. *Epidemiology* 2021; doi: 10.1097/EDE.0000000000001458. PMID: 34954709.
128. Laubach ZM, Holekamp KE, Aris IM, Slopen N, and **Perng W**. Applications of conceptual models from lifecourse epidemiology in ecology and evolutionary biology. *Biology Letters* 2022; 18:20220194. PMID: 35855609.
129. **Perng W**, Nakiwala D, and Goodrich JG. What happens in utero doesn't stay in utero: A review of evidence for prenatal epigenetic programming by per- and polyfluoroalkyl substances (PFAS) in

- children. *Current Environmental Health Reports* 2022; doi: 10.1007/s40572-022-00387-z. PMID: 36414885.
130. **Perng W**, Conway R, Mayer-Davis B, and Dabelea D. Youth-onset type 2 diabetes: the epidemiology of an awakening epidemic. *Diabetes Care* 2023; 46(3):490-499. PMID: 36812420.  
i. *Diabetes On Air Podcast Interview:*  
[https://diabetesjournals.org/care/pages/diabetes\\_care\\_on\\_air](https://diabetesjournals.org/care/pages/diabetes_care_on_air)
131. Semnani-Azad Z, Gaillard R, Hughes AE, Boyle KE, Tobias EK, and **Perng W**, as part of the Precision Medicine in Diabetes Initiatives. Precision stratification of prognostic risk factors associated with outcomes in gestational diabetes mellitus: a systematic review. *Communications Medicine* 2023; in press.
132. Zachariah JP, Jone PN, Agbaje AO, Ryan HH, Trasande L, **Perng W**<sup>‡</sup>, Farzan SF<sup>‡</sup>. *Journal of the American Heart Association* 2024; in press.

Editorials, Commentaries, and Letters to the Editor:

133. **Perng W**, Goodrich JG, Cardenas A, and Watkins DJ. Editorial: Exposure to endocrine-disrupting chemicals and cardiometabolic disease: a developmental origins approach. *Frontiers of Public Health* 2019.7:288. DOI: 10.3389/fpubh.2019.00288. PMID: 31649913.
134. **Perng W** and Oken E. Commentary: Maternal overweight and obesity and offspring diabetes mellitus. *Nature Reviews Endocrinology* 2019. DOI: 10.1038/s41574-019-0249-8. PMID: 31395964.
135. **Perng W**. Commentary: Early Career Highlight. *Pediatric Research* 2019; doi: 10.1038/s41390-018-0232-4. PMID: 30455478.
136. **Perng W**. Expert Commentary: Use of non-carbohydrate fuels is associated with materno-fetal complications in type 1 diabetes pregnancy: metabolomics analysis of the CONCEPTT Trial." *American Diabetes Association (ADA) 2021 Highlights*, June 2021. Online: <https://adahighlights.com/medfyles/07-t1d-pregnancy-complications>
137. Francis EC\*, Dabelea D, **Perng W**. Letter to the editor: Impact of maternal HbA1c on offspring glucose at 4-7 years of age: role of childhood adiposity and other potential confounders. Reply to Periyathambi N, Sukumar N, Weldeselassie Y, Saravanan P [letter]" *Diabetologia* 2021; 64(6):1449-1450. PMID: 33765182.
138. **Perng W** and Dabelea D. Letter to the editor: The insulin hypersecretion hypothesis: cause or effect? Reply to Polychronakos C [letter]" *Diabetologia* 2021; doi:10.1007/s00125;021-05632-y. PMID: 34921607.
139. Gilley SP, Harrall KK, **Perng W**, and Dabelea D. Letter to the Editor: Reply to Johnson. *Pediatrics* 2023; 151: 5.

**Chapters in books:**

1. **Perng W** and Oken E (2016). "Programming long term health: Maternal and fetal nutritional and dietary needs." In: *Early nutrition and long-term health. Mechanisms, consequences, and opportunities*. Editor Jose M. Saavedra.
2. Laubach ZM, Faulk CD, Cardenas A, **Perng W** (2017). "Nutrition, DNA methylation, and developmental origins of cardiometabolic disease: A signal systems approach." In: *Handbook of Nutrition, Diet, and Epigenetics*. Editors: Victor Preedy and Vinood Patel. Springer International Publishing AG, Gewerbestrasse, Switzerland.
3. **Perng W** and Oken E (2021). "Programming long term health: Maternal and fetal nutritional and dietary needs." In: *Early nutrition and long-term health. Mechanisms, consequences, and opportunities*. 2<sup>nd</sup> Edition. Editor Jose M. Saavedra.
4. Francis EC\* and **Perng W** (2021). "Metabolomic biomarkers, metabolite patterns and gestational diabetes mellitus." In: *Biomarkers in Disease: Methods, Discoveries and Applications*. Biomarkers in Diabetes. Editors: Victor Preedy and Vinood Patel. Springer International Publishing AG, Gewerbestrasse, Switzerland.

**Competitive scientific abstracts published or presented at scientific meetings:**

Oral presentations:

\* Denotes student or mentee whom I directly mentored

1. **Perng W**, Baylin A, Marin C, Mora-Plazas M, Villamor E. Inflammation, iron status, and growth of school-age children: a prospective study. *Experimental Biology* 2012. San Diego, CA, USA.
2. **Perng W**, Mora-Plazas M, Rozek LS, Marin C, Baylin A, Villamor E. A prospective study of global DNA methylation and development of adiposity in Colombian schoolchildren. *Experimental Biology* 2013. Boston, MA. USA.
3. **Perng W**, Gillman MW, Fleisch AF, Michalek RD, Watkins S, Isganaitis E, Patti M, Oken E. Metabolomic profiles of childhood obesity. *Early Nutrition* 2014. Munich, Germany.
4. **Perng W**, Rich-Edwards J, Stuebe A, Oken E. Inflammation and weight gain in reproductive-aged women. *Experimental Biology* 2014. San Diego, CA, USA.
5. **Perng W**, Gillman MW, Fleisch AF, Michalek R, Watkins S, Isganaitis E, Patti ME, Oken E. Metabolomic profiles of childhood obesity and cardiometabolic risk. *Experimental Biology* 2014. San Diego, CA, USA.
6. **Perng W**, Villamor E, Mora-Plazas M, Marin C, Baylin A. A prospective study of N-3 and N-6 polyunsaturated fatty acids and weight gain in school-age children. *Society for Pediatric and Perinatal Epidemiologic Research* 2014. Seattle, WA, USA.
7. **Perng W**, Gillman MW, Mantzoros CM, Oken E. Maternal prenatal weight and offspring cardiometabolic health. *The Obesity Society* 2014. Boston, MA, USA.
8. **Perng W**, Hajj H, Belfort MB, Rifas-Shiman SL, Kramer MS, Gillman MW, Oken E. Associations of pre- and postnatal growth with mid-childhood body composition and cardiometabolic profile. *Society of Pediatric and Perinatal Epidemiologic Research* 2015. Denver, CO, USA.
9. **Perng W**, Rifas-Shiman SL, Kramer MS, Haugaard LK, Oken E, Gillman MW, Belfort MB. Early Weight Gain, Linear Growth, and Mid-childhood Blood Pressure. *Experimental Biology* 2016. San Diego, CA, USA.
10. **Perng W**, Ringham BM, Zhang W, Dabelea D. Metabolomics profiles of *in utero* exposure to gestational diabetes during childhood and adolescence: the EPOCH cohort. *European Diabetes Epidemiology Group* 2018. Elsinore, Denmark.
11. **Perng W**, Ringham BM, Kechris K, Zhang W, Dabelea D. Metabolomics profiles of *in utero* exposure to gestational diabetes during childhood and adolescence: the EPOCH cohort. *Society for Pediatric and Perinatal Epidemiology* 2019. Baltimore, MD, USA.
12. **Perng W**, Francis EC, Schuldt C, Barbosa B, Dabelea D, Sauder KA. Pre- and perinatal correlates of ideal cardiovascular health (ICVH) during early childhood: a prospective analysis in the Healthy Start Study. Society for Pediatric and Perinatal Epidemiology (SPER) 2020. Virtual meeting.
13. Soria-Contreras DC\*, **Perng W**, Rifas-Shiman SL, Hivert MF, Chavarro JE, Oken E. Menstrual cycle irregularities and adverse pregnancy outcomes in Project Viva. Oral Session for the Society for Pediatric and Perinatal Epidemiologic Research (SPER) 2021. Virtual meeting.
14. Soria-Contreras DC\*, **Perng W**, Rifas-Shiman SL, Hivert MF, Oken E, Chavarro JE. History of infertility and adverse pregnancy outcomes in Project Viva. Speed talk for the Society for Pediatric and Perinatal Epidemiologic Research (SPER; 2021). Virtual meeting.
15. Soria-Contreras DC\*, Oken E, Tellez-Rojo MM, Rifas-Shiman SL, Chavarro JE, **Perng W**. History of infertility and long-term weight, body composition, and blood pressure among women in Project Viva. Speed talk for the Society for Pediatric and Perinatal Epidemiologic Research (SPER) 2021. Virtual meeting.
16. Francis EC\*, Dabelea D, Shankar K, **Perng W**. Maternal diet quality during pregnancy is associated with biomarkers of metabolic risk among male offspring. Society for Pediatric and Perinatal Epidemiology (SPER) 2021. Virtual meeting.

17. Francis E\*, Kechris KM, Rahman ML, Dabelea D, **Perng W**. Differences in metabolite levels across adolescence underlie *in utero* exposure to maternal obesity or gestational diabetes mellitus: a prospective study in the EPOCH cohort. Precision Medicine in Diabetes Initiative (PMDI) 2021. Virtual Meeting.
18. **Perng W**, Hivert MF, Michelotti G, Oken E, and Dabelea D. Metabolomics predictors of dysglycemia in two youth cohorts: EPOCH and Project Viva. European Diabetes Epidemiology Group (EDEG) 2022. Crete, Greece.
19. **Perng W**, Friedman JE, Janssen RC, Glueck DH, and Dabelea D. Endotoxin biomarkers are associated with adiposity and cardiometabolic risk across 5 years of follow-up in youth. Society of Pediatric and Perinatal Epidemiologic Research (SPER) 2022. Chicago, IL, USA.
20. Francis E\*, Oken E, Hivert MF, Rifas-Shiman SL, Chavarro JE, and **Perng W**. Anti-mullerian hormone status and long-term body composition among women in Project Viva. Society of Pediatric and Perinatal Epidemiologic Research (SPER) 2022. Chicago, IL, USA.
21. Cohen CC\*, Dabelea D, Michelotti G, Tang L, Shankar K, Goran MI, and **Perng W**. Metabolome alterations linking sugar-sweetened beverage intake with dyslipidemia in youth: the Exploring Perinatal Outcomes among Children (EPOCH) Study. American Society of Nutrition (ASN) 2022. Virtual Meeting.
22. Soria-Contreras DC, **Perng W**, Rifas-Shiman SL, Minguez-Alarcon L, Hivert MF, Shifren J, Oken E, Chavarro JE. Associations of hypertensive disorders of pregnancy and gestational diabetes mellitus with menopausal symptoms at midlife in Project Viva. Society of Pediatric and Perinatal Epidemiologic Research (SPER) 2022. Chicago, IL, USA.
23. Soria-Contreras DC, Aris IM, Rifas-Shiman SL, **Perng W**, Hivert MF, Chavarro JE, and Oken E. Reproductive characteristics and change in weight and body composition. The Obesity Society 2022. San Diego, CA.
24. Francis EC, Dabelea D, Boyle KE, Jansson T, **Perng W**. Maternal diet quality is associated with placental proteins in the placental insulin/ growth factor, environmental stress, inflammation, and mTOR signaling pathways: The Healthy Start ECHO Cohort. Society for Reproductive Investigation 2022. Denver, CO
25. Francis EC\*, Dabelea D, Kechris K, Jansson T, **Perng W**. Biomarker Clustering Identifies Metabolic Profiles in Pregnant Women More Strongly Associated with Offspring Adiposity Than Conventional Childhood Obesity Risk Factors. Society for Reproductive Investigation 70<sup>th</sup> Annual Meeting. Friday, March 24<sup>th</sup>, 2023.
26. **Perng W**, Aris IM, Younoszai N, Mueller NT, Sauder KA, and Dabelea D. Perinatal correlates of cardiovascular health during early childhood: the Healthy Start Study. Society for Pediatric and Perinatal Epidemiology (SPER) 2023. Portland, OR, USA.

**Blog posts:**

1. ["Pregnancy: A window to future health."](#) *Weighing-In Blog*. 9/18/2014.
2. ["The 'Omics' era: new biomarkers of metabolic disease risk?"](#) 11/3/2014.
3. ["More than eating for two: Programming your baby's food preference."](#) *Weighing-In Blog*.
4. ["Light up your weight loss!"](#) *Weighing-In Blog*. 2/29/ 2015.
5. ["Obesity is contagious!"](#) *Weighing-In Blog*. 4/7/2015.
6. ["Americans are getting shorter!"](#) *Weighing-in Blog*. 8/5/2015.
7. ["The mystery of rising allergic disease prevalence"](#) *Weighing-in Blog*. 9/22/2015.
8. ["Antibiotics and weight gain."](#) *Weighing-in Blog*. 11/11/ 2015.
9. ["Metabolically-healthy Obese \(MHO\): contentious unicorns?"](#) *Weighing-in Blog*. 12/11/2015.
10. ["Personalized Nutrition."](#) *Weighing-in Blog*. 6/13/2016.
11. ["What is a healthy diet?"](#) *Weighing-in Blog*. 9/21/2016.
12. ["Eat what your grandmother eats!"](#) *Weighing-in Blog*. 3/22/2017.
13. ["Does baby know best?"](#) *Weighing-in Blog*. 3/1/2018,
14. ["A screaming newborn, newfound exhaustion, and a sensitive period?"](#) *Weighing-in Blog*. 7/24/2018.

15. [“Intermittent fasting: just another fad or therapeutic treatment?”](#) *Weighing-In Blog*. 5/23/2020.
16. [“The COVID-19.”](#) *Weighing-In Blog*. 4/30/2020.
17. [“Race/ethnicity as a variable in epidemiological research.”](#) *Weighing-in Blog*. 4/14/2021.
18. [“When should prevention start? Promoting cardiovascular health across the lifecourse.”](#) *Weighing-In Blog*. 10/7/2021.
19. [“Metabolic endotoxemia: the link between obesity and metabolic disease?”](#) *Weighing-in Blog*. 1/19/2022.
20. [“What are traditional American dishes?”](#) *Weighing-in Blog*. 2/1/2023.