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## EDUCATION

2014 – 2018	<b>Postdoctoral Research Scholar, Environmental Health Sciences Center</b> University of Southern California, Los Angeles, CA
2014 – 2015	<b>Postdoctoral Research Scholar, Childhood Obesity Research Center</b> University of Southern California, Los Angeles, CA
2008 – 2014	<b>Ph.D., Integrative Biology of Disease</b> University of Southern California, Los Angeles, CA
2001 – 2005	<b>B.A., Biology, Chemistry Minor, Concentration in Neuroscience</b> University of Pennsylvania, Philadelphia, PA

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## PROFESSIONAL POSITIONS

2018 – present	<b>Assistant Professor</b> Department of Integrative Physiology University of Colorado Boulder, Boulder, CO
2018 – present	<b>Adjunct Assistant Professor</b> Department of Population and Public Health Sciences University of Southern California, Los Angeles, CA
2020 – present	<b>Adjunct Assistant Professor</b> Colorado School of Public Health University of Colorado Anschutz Medical Campus, Aurora, CO
2020 – present	<b>Human Subject Research Advocate</b> Clinical Translational Research Center (CTRC) University of Colorado Boulder, Boulder, CO

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## AWARDS AND HONORS

2023	Provost's Faculty Achievement Award, University of Colorado Boulder
2020, 2021	Outstanding Mentor Award (Honorable Mention) University of Colorado Boulder, Undergraduate Research Opportunities Program (UROP)
2019 – 2021, 2021 – 2022, 2022 – 2023	NIH Loan Repayment Program Clinical Research (NIEHS)
2019	Rosenblith New Investigator Award Health Effects Institute (HEI)
2019	Innovation Lab on Data Science Challenges in Rural Health and Environmental Exposures, NIH Big Data to Knowledge (BD2K) Training Coordinating Center (TCC), Accepted Participant and Travel Award

2018	Outstanding Oral Presentation Award, Diabetes and Obesity Research Institute (DORI) Symposium, Los Angeles, California
2016	Research Merit Travel Award Academic Pediatric Association
2016	Research Merit Travel Award University of Southern California
2016	Research Merit Travel Award International Society of Environmental Epidemiology
2016 – 2017	National Institutes of Health Postdoctoral Training Grant Fellowship (T32)
2015 – 2017	NIH Loan Repayment Program Minority Health and Health Disparities (NIMHD)
2015	Research Merit Travel Award World Obesity Federation
2015	Poster Award of Excellence The Obesity Society Annual Conference
2014	Myronis Endowed PhD Dissertation Completion Fellowship University of Southern California
2012	Ethan Sims Young Investigator Award Finalist The Obesity Society Annual Conference
2012	Travel Award to The National Institute of General Medical Sciences (NIGMS) Postdoctoral Workshop from the Federation of American Societies for Experimental Biology (FASEB)
2010 – 2011	Clinical Translational Science Institute (CTSI) TL1 Research Training Award University of Southern California

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## GRANTS: ACTIVE, PENDING, & COMPLETED

### ACTIVE

<u>Title and Source</u>	<u>Period</u>
<b>NIH NIEHS R01 (R01ES035035)</b> “Perfluoroalkyl substances and the gut microbiome and fecal metabolome: Implications for obesity risk in Hispanic children” PI: Alderete	2023 – 2028
<b>NIH NHGRI U01 (U01HG013288)</b> “Life-course Integration of Environmental Exposures, Omics, and Childhood NAFLD (LEÓN) Study” Multiple PI: Chatzi, Aung, Co-I/Site PI: Alderete	2023 – 2028
<b>CU Boulder Research and Innovation Office (RIO) Seed Grant</b> “Human bioaccumulation of micro-plastics and nano-plastics (MNPs): Implications for infant health” PI: Alderete	2023 – 2025
<b>Anschutz-Boulder (AB) Nexus</b> “Role of the gut microbiota in the pathogenesis of early-onset type 2 diabetes” Multiple PI: Alderete, Perng	2022 – 2023
<b>Southern California Environmental Health Sciences Center Pilot</b>	2022 – 2023

“Perfluoroalkyl substances in breast milk and longitudinal changes in infant growth and gut bacteria in the first year of life”

Multiple PI: Alderete, Conti

**NIH NIEHS Loan Repayment Program (L30ES030803-04)**

2023 – 2024

“Air pollutants and the gut microbiota and metabolome in early life: implications for childhood obesity”

PI: Alderete

**NIH NIMHD P50 (P50MD017344)**

2021 – 2026

Southern California Center for Chronic Health Disparities in Latino Families and Children (SCC-CHDLFC)

Project 1, “El Sendero (Pathways to Health)”

Multiple PI: Alderete, Goran

**Colorado Clinical and Translational Sciences Institute Pilot**

2021 – 2023  
(NCE)

“The Pathways Pilot Study - Pathways from shift work to type 2 diabetes risk”

PI: Alderete (Former PI: Vetter)

**Health Effects Institute (HEI) Rosenblith Award**

2020 – 2024  
(NCE)

“Air pollutants and the gut microbiota and metabolome during early life: Implications for childhood obesity”

PI: Alderete

**NIH NIEHS R01 (R01ES029944)**

2019 – 2024

“Environmental chemical exposures and longitudinal alterations in glucose metabolism, insulin sensitivity, and  $\beta$ -cell function in Hispanic children”

PI: Chatzi, Co-I/Site PI: Alderete

**NIH NCATS UL1 (UL1TR002535)**

2018 – 2024

“Colorado Clinical and Translational Sciences Institute (CCTSI)”

PI: Sokol, Subject Research Advocate (SRA): Alderete

**PENDING**

Title and Source

Period

**NIH NIEHS R01 (R01ES035056)**

2023 – 2028

“Pre- and postnatal exposure to air pollutants and the gut microbiome: Implications for brain development in early and mid-childhood”, *3<sup>rd</sup> percentile, pending funding*.

Multiple PI: Alderete, Peterson

**NIH NIEHS Loan Repayment Program (L30ES030803-05)**

2024 – 2025

“Perfluoroalkyl Substances and the Gut Microbiome and Fecal Metabolome: Implications for Obesity Risk”

PI: Alderete

**NIH NIEHS Fogarty R01 (R01ES035592)**

2023 – 2028

“Effects of particulate matter and the gut microbiome on child neurodevelopment in Bangladesh”, *first submission: 51<sup>st</sup> percentile. Pending resubmission.*

Multiple PI: Islam, Alderete

**NIH NIEHS R01 (R01ES035737)**

2023 – 2028

“Early life exposure to micro- and nano-plastics (MNPs): Implications for infant growth and the developing gut microbiome”, *first submission: not discussed. Pending resubmission.*

**COMPLETED**

<b>NIH NIEHS Loan Repayment Program (L30ES030803-03)</b> “Air pollutants and the gut microbiota and metabolome in early life: implications for childhood obesity” PI: Alderete	2022 – 2023
<b>NIH NIEHS Loan Repayment Program (L30ES030803-02)</b> “Air pollutants and the gut microbiota and metabolome in early life: Implications for childhood obesity” PI: Alderete	2021 – 2022
<b>NIH NIEHS Loan Repayment Program (L30ES030803-01)</b> “Near-roadway and ambient air pollution exposure and the gut microbiome: Implications for obesity and insulin resistance in adolescence” PI: Alderete	2019 – 2021
<b>CU Boulder Research and Innovation Office (RIO) Seed Grant</b> “Exposure to air pollutants and green space: implications for the gut microbiome and metabolome in adolescents living in Denver, Colorado” PI: Alderete	2019 – 2021
<b>NIH NIEHS K99/R00 (K99ES027853 and R00ES027853)</b> “Near-roadway and ambient air pollution exposure and the gut microbiome: Implications for obesity and insulin resistance in adolescence” PI: Alderete	2017 – 2018 2018 – 2022 (NCE)
<b>Southern California Environmental Health Sciences Center Pilot</b> “Near-roadway air pollution exposure and the gut microbiome during pregnancy and early life: Implications for childhood obesity” Multiple PI: Alderete, Toledo-Corral	2018 – 2019
<b>Southern California Environmental Health Sciences Center Pilot</b> “Indoor particulate matter and the nasal and gut microbiota: Implications for acute lower respiratory tract infection in infants from rural Bangladesh” Multiple PI: Alderete, Islam	2018 – 2019
<b>NIH NIEHS T32</b> Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research Training Grant (T32) Postdoctoral Trainee: Alderete	2016 – 2017
<b>NIH NIMHD Loan Repayment Program (L60MD009753)</b> “Air pollution, obesity, and metabolic disease risk air pollution, obesity, and metabolic disease risk” PI: Alderete	2015 – 2017
<b>USC Environmental Health Pilot Grant</b> “Pilot project traffic-related air pollution & the gut microbiome: Implications for childhood obesity” PI: Alderete	2015 – 2016
<b>Myronis Endowed Fellowship</b>	2013 – 2014

Ectopic fat and adipose tissue inflammation in overweight and obese African Americans and Hispanics”

Graduate Student Award: Alderete

### **USC TL1 Predoctoral Trainee**

2010 – 2011

Los Angeles Basin Clinical and Translational Science Institute (CTSI)

Graduate Student Award: Alderete

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## **TRAINEE GRANTS: ACTIVE & PENDING**

### **ACTIVE**

#### Title and Source

#### Period

#### **NIH NIDDK F31 (F31DK134198)**

2022 – 2025

“Near-roadway and ambient air pollution exposure and circulating microRNAs: Implications for hepatic fat accumulation among young adults.”

Primary Mentor: Alderete, PI: PhD Candidate, Patterson

#### **CU Boulder Curci Fellowship**

2022 – 2023

Primary Mentor: Alderete, PhD Student, Yeo

### **PENDING**

#### Title and Source

#### Period

#### **NORC Feasibility Pilot**

2023 – 2024

“The Role of Circadian Misalignment in the Composition and Function of the Human Gut Microbiome”, *submitted May 2023, under review.*

Primary Mentor: Alderete, PI: Postdoctoral Scholar, Holzhausen

#### **NIH NICHD K99/R00 Pathway to Independence Award**

2024 – 2029

“Vertical Microbiome Transmission: Implications for Infant Growth and Development” *submitted June 2023, Score: 42.*

Primary Mentor: Alderete, PI: Postdoctoral Scholar, Holzhausen

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## **PEER-REVIEWED PUBLICATIONS (Citations: 2,806, h-index: 29, i10-index: 48)**

*\*Indicates undergraduate students, \*\*graduate students, or \*\*\*postdoctoral scholars that are/were under the direct supervision of Dr. Alderete.*

1. Bottjer SW, **Alderete TL**, Chang D. (2010) Conjunction of vocal production and perception regulates expression of the immediate early gene ZENK in a novel cortical region of songbirds. *J Neurophysiol.* 103(4):1833-42. PMID:20107119.
2. **Alderete TL**, Byrd-Williams CE, Toledo-Corral CM, Conti D, Weigensberg MJ, Goran MI. (2011) Relationships between IGF-1 and IGFBP-I and adiposity in obese African-American and Latino adolescents. *Obesity (Silver Spring).* 19(5):933-8. PMID:20885383.
3. Toledo-Corral CM, Davis JN, **Alderete TL**, Weigensberg MJ, Ayala CT, Li Y, Hodis HN, Goran MI. (2011) Subclinical atherosclerosis in Latino youth: Progression of carotid intima media thickness (CIMT) and its relationship to cardiometabolic risk factors. *J Pediatr.* 158(6):935-40. PMID:21238987.
4. Lê KS, Mahurkar S, **Alderete TL**, Hasson R, Adam T, Kim JS, Beale E, Greenberg A, Allayee H, Goran MI. (2011) Subcutaneous adipose tissue macrophage infiltration is associated with ectopic fat deposition, hyperinsulinemia and stimulation of NF-kappa-B stress pathway. *Diabetes.* 60(11): 2802-9. PMID:22025778.

5. **Alderete TL**, Gyllenhammer LE, Byrd-Williams CE, Spruijt-Metz D, Goran MI, Davis JN. (2012) Increasing physical activity decreases hepatic fat and metabolic risk factors. *J Exerc Physiol Online*. 2(15):40-54. PMID:23814454.
6. Toledo-Corral CM, **Alderete TL**, Hu HH, Nayak K, Esplana S, Liu T, Goran MI, Weigensberg MJ. (2013) Ectopic fat deposition in prediabetic overweight and obese minority adolescents. *J Clin Endo Metab*. 98(3):1115-21. PMID:23386647.
7. Walker RW, Lê KS, Davis J, **Alderete TL**, Cherry R, Lebel S, Goran MI. (2012) High rates of fructose malabsorption are associated with reduced liver fat in obese African Americans. *J Am Coll Nutr*. 31(5):369-74. PMID:23529994.
8. Walker RW, Sinatra F, Hartiala J, Weigensberg M, Spruijt-Metz D, **Alderete TL**, Goran MI, Allayee H. (2013) Genetic and clinical marker of elevated liver fat content in overweight and obese Hispanic children. *Obesity (Silver Spring)*. 21(12):E790-7. PMID:23804528.
9. Gyllenhammer LE, **Alderete TL**, Mahurka S, Allayee H, Goran MI. (2013) Adipose tissue 11 $\beta$ HSD1 gene expression,  $\beta$ -cell function and ectopic fat in obese African Americans versus Hispanics. *Obesity (Silver Spring)*. 22(1): 14-8. PMID:23836520.
10. **Alderete TL**, Toledo-Corral CM, Desai P, Weigensberg MJ, Goran MI. (2013) Liver fat has a stronger association with risk factors for type 2 diabetes in African-American compared to Hispanic adolescents. *J Clin Endocrinol Metab*. 98(9):3748-54. PMID:23873990.
11. **Alderete TL**, Sattler FR, Sheng X, Tucci J, Mittelman SD, EG Grant, Goran MI. (2015) A novel biopsy method to increase yield of subcutaneous abdominal adipose tissue. *Int J Obes (Lond)*. 39(1):183-6. PMID:24849392.
12. Toledo-Corral CM, **Alderete TL**, Richey J, Sequeira P, Goran MI, Weigensberg MJ. (2015) Fasting, post-OGTT challenge, and nocturnal free fatty acids in prediabetic versus normal glucose tolerant overweight and obese Latino adolescents. *Acta Diabetologica*. 52(2):277-84. PMID:25109287.
13. **Alderete TL**, Sattler FR, Richey JM, Allayee H, Mittelman, SD, Sheng X, Tucci J, Gyllenhammer LE, Grant EG, Goran MI. (2015) Salsalate treatment improves glycemia without altering adipose tissue in non-diabetic obese Hispanics. *Obesity (Silver Spring)*. 23(3):543-51. PMID:25644856.
14. Kayser BD, Toledo-Corral CM, **Alderete TL**, Weigensberg MJ, Goran MI. (2015) Temporal relationships between adipocytokines and diabetes risk in obese Hispanic adolescents during puberty. *Obesity (Silver Spring)*. 23(7):1479-85. PMID:26046253.
15. Gyllenhammer LE, **Alderete TL**, Toledo-Corral CM, Weigensberg MJ, Goran MI. (2016) Saturation of subcutaneous adipose tissue expansion and accumulation of ectopic fat associated with metabolic dysfunction during late and post-pubertal growth. *Int J Obes (Lond)*. 40(4):601-6. PMID:26443340.
16. **Alderete TL**, Autran C, Brekke BE, Knight R, Bode L, Goran MI, Fields A. (2016) Associations between human milk oligosaccharides and infant body composition in the first six months of life. *Am J Clin Nutr*. 102(6):1381-82. PMID:26511224.
17. Gyllenhammer LE, Lam J, **Alderete TL**, Allayee H, Akbari O, Katkhouda N, Goran MI. (2016) Lower omental T-regulatory cell count is associated with higher fasting glucose and lower  $\beta$ -cell function in adults with obesity. *Obesity (Silver Spring)*. 24(6):1274-82. PMID:27133873.
18. **Alderete TL**, Habre R, Toledo-Corral CM, Berhane K, Zhanghua C, Lurmann FW, Weigensberg MJ, Goran MI, and Gilliland FD. (2017) Longitudinal associations between ambient air pollution with insulin sensitivity,  $\beta$ -cell function, and adiposity in Los Angeles Latino children. *Diabetes*. 66(7):1789-1796. PMID:28137791.
19. Chen Z, Salam MT, **Alderete TL**, Habre R, Bastain T, Berhane K, and Gilliland FD. (2017) Effects of childhood asthma on the development of obesity among school-aged children. *Am J Respir Crit Care Med*. 195(9):1181-1188. PMID: 28103443.

20. Goran MI, Martin A, **Alderete TL**, Fujiwara H, Fields D. (2017) Fructose in breast milk is positively associated with infant body composition at 6 months of age. *Nutrients*. 16(9). PMID: 28212335.
21. Toledo-Corral CM<sup>a</sup>, **Alderete TL**<sup>a</sup>, Habre R, Berhane K, Lurmann FW, Weigensberg MJ, Goran MI, and Gilliland FD. (2018) Effects of air pollution exposure on glucose metabolism in Los Angeles minority youth. *Pediatric Obesity*. 13(1):54-62. PMID:27923100. <sup>a</sup>*Co-first author*.
22. **Alderete TL**, Song A, Bastin T, Habre R, Toledo-Corral CM, Salam MT, Lurmann F, Gilliland FD, Breton CV. (2018) Prenatal traffic-related air pollution exposures, cord blood adipokines and infant weight. *Ped. Obesity*. 13(6):348-356. PMID: 29098799.
23. Goran MD, Riemer SL, **Alderete TL**. (2018) Simplified and age-appropriate recommendation for added sugars in children. *Ped. Obesity*. 13(4):269-272. PMID: 28921869.
24. **Alderete TL**, Jones RB, Chen Z, Kim JS, Habre R, Lurmann F, Gilliland FD, Goran MI. (2018) Exposure to traffic-related air pollution and the composition of the gut microbiota in overweight and obese adolescents. *Environ Res*. 161:472-478. PMID: 29220800.
25. Jones RB, **Alderete TL**, Martin AA, Geary BA, Hwang DH, Palmer SL, Goran MI. (2018) Probiotic supplementation increases obesity with no detectable effects on liver fat or gut microbiota in obese Hispanic adolescents: a 16-week, randomized, placebo-controlled trial. *Ped. Obesity*. 13(11):705-714. PMID: 29493105.
26. Kim JS, **Alderete TL**, Chen Z, Lurmann F, Rappaport E, Habre R, Berhane K, Gilliland FD. (2018) Longitudinal associations of in utero and early life near-roadway air pollution with trajectories of childhood body mass index. *Environ Health*. 17(1):64. PMID: 30213262.
27. Chen Z, Herting MM, Chatzi L, Belcher BR, **Alderete TL**, McConnell RS, Gilliland FD (2018). Regional and traffic-related air pollutants are associated with higher consumption of fast food and trans-fat among adolescents. *Am J Clin Nutr*. 109(1):99-108. PMID: 30596809.
28. **Alderete TL**<sup>a</sup>, Jin R<sup>a</sup>, Walker D<sup>a</sup>, Valvi D, Chen Z, Jones D, Peng C, Gilliland FD, Berhane K, Conti D, Goran MI, Chatzi L. McConnell RS, Gilliland FD. (2019) Perfluoroalkyl substances, metabolomic profiling, and alterations in glucose homeostasis among overweight and obese Hispanic children: A proof-of-concept analysis. *Environ Int*. 126:445-53. PMID: 30844580. <sup>a</sup>*Co-first author*.
29. Jones RB, **Alderete TL**, Kim JS, Millstein J, Gilliland FD, Goran MI. (2019) High intake of dietary fructose in overweight/obese teenagers associated with depletion of *Eubacterium* and *Streptococcus* in gut microbiome. *Gut Microbes*. 10(6):712-19. PMID: 30991877.
30. Chen Z, Newgard CB, Kim JS, Ilkayeva O, **Alderete TL**, Thomas DC, Berhane K, Breton C, Chatzi L, Bastain TM, McConnell R, Avol E, Lurmann F, Muehlbauer M, Hauser ER, Gilliland FD. (2019) Near-roadway air pollution exposure and altered fatty acid oxidation among adolescents and young adults – the interplay with obesity. *Environ Int*. 130:104935. PMID: 31238265.
31. Berger PK, Plows JF, Jones RB, Pollock NK, **Alderete TL**, Goran MI. (2019) Maternal blood pressure mediates the associations between maternal obesity and infant weight gain in early postpartum. *Pediatric Obesity*. 14(11):e12560. PMID: 31297972.
32. Kim JS, Chen Z, **Alderete TL**, Toledo-Corral CM, Berhane K, Gilliland FD. (2019) Associations of air pollution, obesity and cardiometabolic health in young adults: the Meta-AIR Study. *Environment International*. 14;133(Pt A):105180. PMID: 31622905.
33. Berger PK, Plows JF, Jones RB, **Alderete TL**, Yonemitsu C, Poulsen M, Ryoo JH, Peterson BS, Bode L, Goran MI. (2020) Human milk oligosaccharide 2'-fucosyllactose links feedings at 1 month to cognitive development at 24 months in infants of normal and overweight mothers. *PloS One*. 15(2):e0228323. PMID: 32049968.
34. **Alderete TL**, Wild LE\*, Mierau SM\*, Bailey MJ\*, Patterson WB\*\*, Berger PK, Jones RB, Plows JF, Goran MI. (2020) Added sugar and sugar-sweetened beverages are associated with increased

postpartum weight gain and soluble fiber intake is associated with postpartum weight loss in Hispanic women from Southern California. *AJCN* 112(3):519-526. PMID: 32597935.

35. Fouladi F, Bailey MJ\*, Patterson WB\*\*, Sioda M, Blakley IV, Fodor AA, Jones RB, Chen Z, Kim JS, Lurmann F, Martino C, Knight R, Gilliland FD, **Alderete TL**. (2020) Air pollution exposure is associated with the gut microbiome as revealed by shotgun metagenomic sequencing. *Environ Int.* 138:105604. PMID: 32135388.
36. Berger PK, Plows JF, Jones RB, **Alderete TL**, Rios C, Pickering TA, Fields DA, Bode L, Peterson BS, Goram MI. (2020) Associations of maternal fructose and sugar-sweetened beverage and juice intake during lactation with infant neurodevelopment outcomes at 24 months. *AJCN.* 112(6):1516-1522. PMID: 33020800.
37. Jones RB, Berger PK, Plows FJ, **Alderete TL**, Milstein J, Fogel J, Iablokov SN, Rodionov DA, Osterman AL, Bode L, Goram MI. (2020) Lactose-reduced infant formula with added corn syrup solids is associated with distinct gut microbiota in Hispanic infants. *Gut Microbes.*12(1):1813534. PMID: 32887539.
38. Plows JF, Berger PK, Jones RB, Yonemitsu C, Ryoo JH, **Alderete TL**, Bode L, Goran MI. (2020) Associations between human milk oligosaccharides (HMOs) and eating behavior in Hispanic infants at 1 and 6 months of age. *Pediatric Obesity*, e12686. PMID: 32621402.
39. Berger PK, Plows JF, Jones RB, **Alderete TL**, Yonemitsu C, Ryoo JH, Bode L, Goran MI. (2020) Human milk oligosaccharides and Hispanic infant weight gain the first 6 months. *Obesity.* 28(8):1519-1525. PMID: 32935530.
40. Chen Z, Yang T, Walker DI, Thomas DC, Qiu C, Chatzi L, **Alderete TL**, Kim JS, Conti DV, Breton CV, Liang D, Hauser ER, Jones DP, Gilliland FD. (2020) Dysregulated lipid fatty acid metabolism link perfluoroalkyl substances exposure and impaired glucose metabolism in young adults. *Environ Int.*145:106091. PMID: 32892005.
41. Wild LE\*, **Alderete TL**, Naik NC\*, Patterson WB\*\*, Berger PK, Jones RJ, Plows JF, Goran MI. (2021) Specific amino acids but not total protein attenuate postpartum weight gain among Hispanic women from Southern California. *Food Sci & Nutri.* 13;9(4):1842-1850. PMID: 33841803.
42. Plows JF, Berger PK, Jones RB, **Alderete TL**, Yonemitsu C, Najera JA, Khwajazada S, Bode L, Goran MI. (2021) Longitudinal changes in human milk oligosaccharides (HMOs) over the course of 24 months of lactation. *J Nutri.* 8;151(4):876-882. PMID: 33693851.
43. Toledo-Corral CM, **Alderete TL**, Herting MM, Habre R, Peterson AK, Lurmann F, Goran MI, Weigensberg MJ, Gilliland FD. (2021) Ambient air pollutants are associated with morning serum cortisol in overweight and obese Latino youth in Los Angeles. *Environ Health.* 8;20(1):39. PMID: 33832509.
44. Patterson WB\*\*, Glasson J\*, Naik NC\*, Jones RB, Berger PK, Plows JF, Minor HA, Lurmann F, Goran MI, **Alderete TL**. (2021) Prenatal exposure to ambient air pollutants and early infant growth and adiposity in the Southern California Mother's Milk Study. *Environmental Health.* 20(1):67. PMID: 34090448.
45. **Alderete TL**<sup>a</sup>, Jones RB<sup>a</sup>, Shaffer JP, Holzhausen EA\*\*\*, Patterson WB\*\*, Kazemian E\*\*\*, Chatzi L, Knight R, Plows JF, Berger PK, Goran MI. (2021) Early life gut microbiota is associated with rapid infant growth in Hispanics from Southern California. *Gut Microbes.* 13(1):1961203. PMID: 34424832.  
<sup>a</sup>Co-first author.
46. Goodrich JA, **Alderete TL**, Baumert BO, Berhane K, Chan Z, Gilliland FD, Goran MI, Hu X, Jones DP, Margetaki K, Rock S, Stratakis N, Valvi D, Walker DI, Conti DV, Chatzi. L. (2021) Exposure to perfluoroalkyl substances and glucose homeostasis in youth. *Environmental Health Perspectives.* 129(9):97002. PMID: 34468161.



47. Wild LE\*, Patterson WB\*\*, Jones RB, Plows JF, Berger PK, Riso C, Fogel JL, Goran MI, **Alderete TL**. (2021) Risk of micronutrient inadequacy among Hispanic, lactating mothers: Preliminary evidence from the Southern California Mother's Milk Study. *Nutrients*. 13(9): 3252. PMID: 34579129.
48. Riseberg E, James K, Woodin M, Melamed R, **Alderete TL**, Corlin, C. (2021) Multipollutant, longitudinal analysis of the association between urinary tungsten and incident diabetes in a rural population. *Environmental Epidemiology*. 5(6):e173. PMID: 34909553.
49. Plows JF, K, Berger PK, Jones RB, Campbell E, Leibovitch E, **Alderete, TL**, Horowitz M, Pi-Sunyer X, Gallagher D, Goran MI. (2021) Development and validation of a prediction model for infant fat mass. *Journal of Pediatrics*. 243:130-1334.e2. PMID: 34971655.
50. Jones RB, Arenaza L, Rios C, Jasmine PF, Berger PK, **Alderete TL**, Fogel JL, Nayak K, Mohamed P, Hwang DH, Palmer S, Sinatra F, Allayee HA, Kohli R, Goran MI. (2021) The *PNPLA3* genotype, arachidonic acid intake and unsaturated fat intake influences liver fibrosis in Hispanic youth with diabetes. *Nutrients*. 13(5):1621. PMID: 34065978.
51. Plows JF, Berger PK, Jones RB, **Alderete TL**, Yonemitsu C, Najera JA, Khwajazada S, Bode L, Goran MI. (2021) Longitudinal changes in human milk oligosaccharides (HMOs) over the course of 24 months of lactation. *Journal of Nutrition*. 151(4):876-882. PMID: 33693851.
52. Wild LE\*, McKailey W, Powell A\*, James KA, Laura C, **Alderete TL**. (2022) County-level social vulnerability is positively associated with cardiometabolic disease in Colorado. *IJERPH*, 19(4):2202. PMID: 35206386.
53. Hampson HE, Jones RB, Berger PK, Plows JF, Schmidt KA, **Alderete TL**, Goran MI. (2022) Adverse effects of infant formula made with corn-syrup solids on the development of eating behaviors in Hispanic children. *Nutrients*. 14(5):1115. PMID: 35268090.
54. Schmidt KA, Jones RB, Rios C, Corona Y, Berger PK, Plows JF, **Alderete TL**, Fogel J, Hampson H, Hartiala J, Cai Z, Allayee H, Nayak KS, Sinatra FR, Harlan G, Pickering TA, Salvy S-J, Mack W, Kohli R, Goran MI. (2022) Clinical intervention to reduce dietary sugar does not impact liver fat in Latino youth, regardless of *PNPLA3* genotype: A randomized controlled trial. *Journal of Nutrition*. 152(7):1655-1665. PMID: 35218194.
55. Berger PK, Hampson HE, Schmidt K, **Alderete TL**, Furst A, Yonemitsu C, Demerath E, Goran MI, Fields DA, Bode L. (2022) Stability of human milk oligosaccharide concentrations over 1 week of lactation and over 6 hours following a standard meal. *Journal of Nutrition*. 152(12):2727-33. PMID: 36111739.
56. Baumert BO, Goodrich JA, Hu X, Walker DI, **Alderete TL**, Chen Z, Valvi D, Rock S, Berhane K, Gilliland FD, Goran MI, Jones DP, Conti DV, Leda C. (2022) Plasma concentrations of lipophilic persistent organic pollutants and glucose homeostasis in youth populations. *Environmental Research*. 212(Pt B):113296. PMID: 35447156.
57. Berger PK, Bansal R, Sawardekar S, Yonemitsu C, Furst A, Hampson HE, Schmidt KA, **Alderete TL**, Bodes L, Goran MI, Peterson BS. (2022) Associations of human milk oligosaccharides with infant brain tissue organization and regional blood flow at 1 month of age. *Nutrients*. 14(18):3820. PMID: 36145194.
58. Costello E, Goodrich J, Patterson WB\*\*, Rock S, Li Y, Baumert B, Gilliland F, Goran MI, Chen Z, **Alderete TL**, Conti DV, Chatzi L. (2022) Diet quality is associated with glucose regulation in a cohort of young adults. *Nutrients*. 14(18):3734. PMID: 36145110.
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72. Mokhtari P, Holzhausen EA\*\*\*, Chalifour BN\*\*\*, Schmidt KA, Babaei M, Adise S, **Alderete TL**, Goran MI. (2023) Associations Between Dietary Sugar and Fiber on Infant Gut Microbiome Colonization at 6 months of Age. *The Journal of Nutrition*. Epub ahead of print. PMID: 37717629.
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78. Debertin JG, Holzhausen EA<sup>\*\*\*</sup>, Walker DI, Pacheco BP, James KA, **Alderete TL**, Corlin L. (2023) Associations between metals and metabolomic profiles related to diabetes among adults in a rural region. *Environ Res*. 2023 1:117776. Epub ahead of print. PMID: 38043890.
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## MANUSCRIPTS UNDER REVIEW

*Indicates \*\*\*postdoctoral scholars, \*\*graduate students, or \*undergraduate students that are/were under the direct supervision of Dr. Alderete.*

80. Naik NC<sup>\*</sup>, Holzhausen EA<sup>\*\*\*</sup>, Chalifour BN<sup>\*\*\*</sup>, Coffman MM<sup>\*\*</sup>, Fredrick Lurmann F, Goran MI, Bode L, **Alderete TL**. (2023) Air pollution exposure may impact the composition of human milk oligosaccharides. *Submitted to Scientific Reports*.
81. Chen JC, Goodrich JA, Walkder DI, Liao J, Costello E, **Alderete TL**, Valvi D, Baumert BO, Rock S, Jones DP, Eckel SP, McConnell R, Gilliland FD, Aung MT, Conti DV, Chen Z, Chatzi L. Exposure to per- and polyfluoroalkyl substances and high-throughput proteomics in Hispanic youth. *Submitted to Environment International*.

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## REVIEWS AND BOOK CHAPTERS

*\*Indicates undergraduate students or \*\*graduate students that are/were under the direct supervision of Dr. Alderete.*

82. Goran MI, **Alderete TL**. (2010) Targeting adipose tissue inflammation to treat the underlying basis of the metabolic complication of obesity. *Obesity Treatment: Challenges and Opportunities*. Nestlé Nutr Inst Workshop Ser. 73:49-60. PMID: 23128765.
83. **Alderete TL**, Toledo-Corral CM, Goran MI. (2014) Metabolic basis of ethnic differences in diabetes risk in overweight and obese youth. *Curr Diab Rep*. 14(2):455. PMID: 24445905.
84. Toledo-Corral CM, **Alderete TL**, Goran MI. (2015) Obesity-associated dyslipidemia and its association to insulin resistance, ectopic fat, and atherosclerosis. *Lipid Management* (Springer publishing) XIV. doi:10.1007/s11892-013-0455-z.
85. **Alderete TL**<sup>a</sup>, Chen Z<sup>a</sup>, Toledo-Corral CM<sup>a</sup>, Contreras ZA, Kim JS, Habre R, Chatzi L, Bastain T, Breton CV, Gilliland FD. (2018) Ambient and traffic-related air pollution exposures as novel risk factors for metabolic dysfunction and type 2 diabetes. *Current Epidemiology Reports*. 5(2): 79-91. <sup>a</sup>*Co-first author*. PMID: 30319933.
86. Bailey MJ<sup>\*</sup>, Naik NN<sup>\*</sup>, Wild LE<sup>\*</sup>, Patterson WB<sup>\*\*</sup>, **Alderete TL**. (2020) Exposure to air pollutants and the gut microbiota: A potential link between exposure, obesity, and type 2 diabetes. *Gut Microbes*. 2;11(5): 1188-1202. PMID: 32347153.

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## PUBLISHED ABSTRACTS, POSTERS, AND ORALS

*\*Indicates undergraduate students, \*\*graduate students, or \*\*\*postdocs that are/were under the direct supervision of Dr. Alderete.*

1. **Alderete TL**, Toledo-Corral CM, Ventura EE, Byrd-Williams CE, Davis JN, Lane CJ, Weigensberg MJ, Goran MI. Higher risk factors for type 2 diabetes in severely obese Hispanics youth independent of body composition and fat distribution. *Obesity*. 17(suppl2):S191, 2009.
2. Toledo-Corral CM, Davis JN, **Alderete TL**, Weigensberg MJ, Ayala CT, Li Y, Hodis HN, Goran MI. Subclinical atherosclerosis in Latino youth: Progression of carotid intima media thickness (CIMT) and its relationship to cardiometabolic risk factors. *Obesity*. 8 (suppl2):S215, 2010.
3. **Alderete TL**, Byrd-Williams CE, Toledo-Corral CM, Conti D, Weigensberg MJ, Goran MI. Subcutaneous abdominal adipose tissue (SAAT) and hepatic fat fraction (HFF) explain higher insulin-like growth factor (IGF)-1 and IGF binding protein-1 levels in obese African-Americans compared to obese Latino teenagers. *Obesity*. 18 (suppl2):S220, 2010.
4. **Alderete TL**, Toledo-Corral CM, Chang C-C, Weigensberg MJ, and Goran MI. Longitudinal changes in adiposity predict insulin-like growth factor (IGF)-I and IGF binding proteins (BP)-3 in overweight Latino adolescents. *Obesity*. 19 (suppl1):S221, 2011.
5. **Alderete TL**, Toledo-Corral CM, Weigensberg MJ, Goran MI. Liver fat not visceral fat drives insulin resistance and dyslipidemia among obese Hispanic youth. *Diabetes*. 61(S1):A510, 2012.
6. Kayser BD, Toledo-Corral CM, **Alderete TL**, Weigensberg MJ, Goran MI. The associations between blood neutrophils, lymphocytes, and monocytes with changes in percent body fat (BF%) are distinctly modified by pubertal stage in overweight Latino adolescents. *Endocr Rev*. 34:SUN-693, 2013.
7. Jimenez M, **Alderete TL**, Goran MI, Weigensberg MJ, Toledo-Corral CM. Decreased  $\beta$ -cell function in overweight Latino youth within normal fasting glucose parameters. *Endo. Prac*. 20(1):37A, 2014.
8. **Alderete TL**, Toledo-Corral CM, Weigensberg MJ, Goran MI. Pancreatic fat, independent of subcutaneous, visceral and liver fat, explains elevated risk for metabolic disease in African Americans but not Hispanics. *Endo. Prac*. 20(1):34A, 2014.
9. **Alderete TL**, Toledo-Corral CM, Gyllenhammer LE, Goran MI. Gut bacterial translocation interacts with *PNPLA3* genotype to predict elevated liver fat among Hispanic children. *Diabetes and the Microbiome Research Symposium*. 33, 2014. *Poster presentation*.
10. **Alderete TL**, Toledo-Corral CM, Gyllenhammer LE, Goran MI. Gut bacterial translocation is associated with increased adiposity and further related to elevated liver fat in overweight and obese Hispanic children with GG *PNPLA3* variants. *The Obesity Society Annual Meeting at Obesity Week*. TLB-2040-P, 2014. *Poster presentation*.
11. **Alderete TL**, Knight R, Autran C, Brekke BE, Bode L, Goran MI. Associations between human milk oligosaccharides and infant body composition in the first six months of life. *The Obesity Society Annual Meeting at Obesity Week. Special pediatric obesity section blitz presentation and poster*. T-P-356, 2015.
12. Goran MI, Noble E, Fodor A, Jones R, **Alderete TL**, Martin A, Kanoski S. Effects of dietary sugars on gut microbiome and cognitive function in a rat model. *Food-microbiome interaction: Implications for health & disease. Special pediatric obesity section blitz presentation and poster*, 2016.
13. **Alderete TL**, Habre R, Toledo-Corral C, Chen Z, Berhane K, Lurmann F, Weigensberg M, Goran M, Gilliland F. The longitudinal effects of ambient air pollution exposure on obesity and risk factors for type 2 diabetes in Los Angeles Latino children. *ISEE Conference Abstracts Volume 2016, Issue 117*.
14. **Alderete TL**, Jones R, Chen Z, Kim J, Lurmann F, Habre R, Gilliland FD, Goran MI. Traffic-related air pollutants are associated with the gut microbiota in adolescents. *Keystone Symposia: Gastrointestinal Control of Metabolism*, 2017. *Poster presentation*.

15. **Alderete TL**, Jen R, Walker D, Valvi D, Berhane K, Gilliland F, Goran M, Chatzi L. Exposure to perfluoroalkyl substances and longitudinal alteration in glucose metabolism among overweight and obese Hispanic children: A metabolomics approach. ISEE Conference Abstracts Volume 2018, 124. *Oral presentation.*
16. Chen Z, Walker D, Kim J, **Alderete T**, Chatzi L, Jones D, Pereira M, Conti D, Thomas D, Hauser E, Gilliland F. Exposures to traffic-related air pollutants are associated with changes in amino acid metabolism. ISEE Conference Abstracts Volume 2018, Issue 124. *Oral presentation.*
17. **Alderete TL**, Jin R, Walker DI, Valvi D, Chen Z, Jones DP, Peng C, Gilliland FD, Berhane K, Conti DV, Goran MI, Chatzi L. Exposure to perfluoroalkyl substances and longitudinal alterations in glucose metabolism among overweight and obese Hispanic children: A metabolomics approach. Gordon Research Conference on Metabolomic and Human Health, 2019. *Poster presentation.*
18. **Alderete TL**, Fouladi F, Sioda M, Fodor A, Blakley I, Knight R, Chen Z, Kim J, Gilliland F. Exposure to ambient air pollutants is associated with the composition of the gut microbiome in adolescents from Southern California. ISEE Conference Abstracts Volume 2019. *Digital print and poster presentation.*
19. Patterson WB\*\*, Glasson J\*, Naik NC\*, Kazemian E, Jones RB, Berger PK, Plows JF, Minor HA, Lurmann F, Goran MI, **Alderete TL**. Prenatal exposure to ambient air pollutants and early infant growth and adiposity in the Southern California Mother's Milk Study. ISEE Conference Abstracts Volume 2020. *Digital print and poster presentation.*
20. Fouladi F\*\*\*, Patterson WB\*\*, Kazemian E, Fodor A, Knight R, Gilliland FD, Kim J, Lurmmann F, Chatzi L, Chen Z, **Alderete TL**. The gut microbiome contributes to the association between ozone exposure and fatty acid oxidation. ISEE Conference Abstracts Volume 2020. *Digital print and poster presentation.*
21. Fouladi F\*\*\*, Bailey MJ\*, Patterson WB\*\*, Sioda M, Blakely IC, Fodor AA, Jones RB, Chen Z, Kim J, Lurmann F, Martino C, Knight R, Gilliland FD, **Alderete TL**. Air pollution exposure is associated with the gut microbiome as revealed by shotgun metagenomic sequencing. Health Effects Institute Annual Meeting, 2020. *Oral presentation.*
22. Goodrich JA, Margetaki K, Hu X, **Alderete TL**, Walker DL, Valvi D, Gilliland FD, Chen Z, Berhane K, Jones DP, Goran MI, Conti DV, Chatzi L. Exposure to perfluoroalkyl substances is associated with impaired glucose homeostasis in Hispanic youth. ISEE Conference Abstracts Volume 2020. *Digital print and poster presentation.*
23. Riseberg E, James K, Wooding M, Melamed R, **Alderete TL**, Corlin L. Multipollutant, longitudinal analysis of the associations between urinary tungsten and incident diabetes in a rural population. ISEE Conference Abstracts Volume 2020. *Digital print and poster presentation.*
24. Chen Z, Yang T, Walker DI, Thomas DC, Qiu C, Chatzi L, **Alderete TL**, Kim JS, Conti DV, Breton CV, Liang D, Hauser ER, Jones DP, Gilliland FD. Dysregulated lipid fatty acid metabolism link perfluoroalkyl substances exposure and impaired glucose metabolomics in young adults. ISEE Conference Abstracts Volume 2020. *Digital print and oral presentation.*
25. Riseberg E, Woodin M, Melamed R, **Alderete TL**, James KA, Corlin L. Sex as an effect modifier of the association between co-exposure to multiple toxic metals and the risk of type 2 diabetes. BIRCWH Meeting: Building Interdisciplinary Research Careers in Women's Health 2020, Journal of Women's Health. 29(12):A11 (1 page).
26. Patterson WB\*\*, Bailey MJ\*\*, Lurmann FW, Chen Z, Chatzi C, Gilliland FD, **Alderete TL**. Exposures to air pollutants, circulating miRNAs, and cardiometabolic health among young adults. ISEE Conference Abstracts 2021. *Digital print and lightning talk.*
27. Bailey MJ\*\*, Morgan ZE\*, Patterson WB\*\*, Shaffer JP, Naik NC\*, Berger PK, Plows JF, Kelsey Schmidt, Minor HA, Lurmann FW, Goran MI, **Alderete TL**. Ambient air pollution exposure is associated with the infant gut microbiota. ISEE Conference Abstracts 2021. *Digital Print and poster presentation.*
28. Morgan ZE\*, Bailey MJ\*\*, Naik NC\*, Patterson WB\*\*, Berger PK, Plows JF, Schmidt K, Hampson H, Minor HA, Lurmann FW, Peterson B, Goran MI, **Alderete TL**. Early life exposure to ambient air

pollutants is associated with decreased cognitive development in Hispanics infants from Southern California. ISEE Conference Abstracts 2021. *Digital print and poster presentation.*

29. Baumert BO, Goodrich JA, Hu X, Walker DI, **Alderete TL**, Chen Z, Valvi D, Rock S, Berhane K, Gilliland FD, Goran MI, Jones DP, Conti DV, Chatzi L. Exposure to lipophilic chemicals and glucose homeostasis in youth. ISEE Conference Abstracts 2021. *Digital print and oral presentation.*
30. Goodrich J, Cserbik D, Hu X, Walker DI, **Alderete TL**, Chen Z, Valvi D, Baumert BO, Rock S, Berhane K, Gilliland FD, Goran MI, Jones DP, Conti DV, Chatzi L. Metabolic signatures of youth exposure to per- and polyfluoroalkyl substances. ISEE Conference Abstracts 2021. *Digital print and lightning talk.*
31. Gukasyan J, Goodrich JA, Rock S, Costello L, Lopez A, Margetaki K, **Alderete TL**, Chen Z, Gilliland FD, Conti DV, Chatzi L. Frequent cannabis smoking and association with Prediabetes and Diabetes in early adulthood. ISEE Conference Abstracts 2022, Athens, Greece. *Digital print and poster presentation.*
32. Costello E, Goodrich J, Patterson W\*\*, Walker DI, Baumert B, Rock S, **Alderete TL**, Gilliland F, Chen Z, Conti DV, Chatzi L. Metabolic signatures associated with diet quality in young adults. ISEE Conference Abstracts, Athens, Greece 2022. *Digital print and poster presentation.*
33. Goodrich JA, Davidson E, Baumert BO, Chen Y, Walker DI, Lin X, Hu X, **Alderete TL**, Chen Z, Valvi D, Fuentes ZC, Rock S, Berhane K, Gilliland FD, Jones DP, Goran MI, Conti DV, Vasiliou V, Chatzi L. Exposure to per- and polyfluoroalkyl substances is associated with altered  $\beta$ -cell function. ISEE Conference Abstracts 2022, Athens, Greece. *Digital print and oral presentation.*
34. Goodrich JA, Baumert BO, Wang H, Walker DI, He J, Hu X, **Alderete TL**, Chen Z, Valvi D, Rock S, Berhane K, Gilliland FD, Goran MI, Jones DP, Conti DV, Chatzi L. Metabolic signatures of youth exposure to mixtures of lipophilic persistent organic pollutants. ISEE Conference Abstracts, Athens, Greece 2022. *Digital print and poster presentation.*
35. Debertin JG, Holzhausen E\*\*\*, Walker DI, James JA, **Alderete TL**, Corlin L. Associations between metals and metabolomic profiles related to diabetes among adults in a rural region. ISEE Conference Abstracts 2022, Athens, Greece. *Digital print and poster presentation.*
36. Patterson WB\*\*, Goodrich J, Costello E, Lurmann F, Chen Z, Chatzi L, Gilliland FD, **Alderete TL**. Metabolism, and non-alcoholic fatty liver disease in young adults. ISEE Conference Abstracts 2022, Athens, Greece. *Digital print and oral presentation.*
37. Bailey M\*\*, Clark K\*\*, Islam T, **Alderete TL**. Exposure to indoor particulate matter is associated with gastrointestinal and respiratory microbial communities. ISEE Conference Abstracts 2022, Athens, Greece. *Digital print and oral presentation.*
38. **Alderete TL**, Goodrich J, Wang H, Holzhausen EA\*\*\*, Bailey M\*\*, Lin X, Fuentes ZC, Walker DI, Conti DV, Chatzi L, Goran MI. The breast milk perfluorome is associated with infant growth in the first year of life. ISEE Conference Abstracts 2022, Athens, Greece. *Digital print and poster presentation.*
39. Holzhausen EA\*\*\*, Patterson WB\*\*, Baccarelli A, Kupsco A, Lurmann F, Goran MI, **Alderete TL**. Exposure to ambient air pollution is associated with increased expression of breastmilk miRNAs. ISEE Conference Abstracts 2022, Athens, Greece. *Digital print and poster presentation.*
40. Holzhausen E\*\*\*, Patterson WB\*\*, Baccarelli A, Kupsco A, Goran MI, **Alderete TL**. The association between breast milk miRNA and the infant gut microbiota: a potential mechanism for developmental programming of the infant microbiome. Front Range Microbiome Symposium 2022, Fort Collins, CO. *Poster presentation.*
41. Holzhausen EA\*\*\*, Patterson WB\*\*, Bailey MJ\*\*, Chang HH, Liang D, Lurmann F, Sarnat J, Goran MI, **Alderete TL**. Air pollutants and the gut microbiota and metabolome during early life: Implications for childhood obesity. Health Effects Institute Annual Conference 2022, Washington DC. *Published abstract.*

42. Mokhtari P, Schmidt K, Holzhausen EA<sup>\*\*\*</sup>, Chalifour BN<sup>\*\*\*</sup>, Babaei M, González JO, Alderete TL, Goran MI. Maternal dietary sugar intake and human milk oligosaccharide concentrations in Latino women. CHLA Science Day, Los Angeles CA, 2023. *Poster presentation*.
43. Clark KC<sup>\*\*</sup>, Cleveland JC, Holzhausen EA<sup>\*\*\*</sup>, Stieneker Z\*, Liam JJ\*, Patterson WB<sup>\*\*</sup>, Kraemer G\*, Vetter C, Broussard JL, Melanson EL, Creasy SA, Wright KP, **Alderete TL**. Pathways: A pilot study examining the impact of nightshift work on obesity and type 2 diabetes risk in free-living shift workers. SLEEP 2023, Indianapolis, IN. *Poster presentation*.
44. Hampson HE, Costello L, Walker DI, Wang H, Baumert BO, Valvi D, Rock S, Jones DP, Goran MI, Gilliland FD, Conti DV, **Alderete TL**, Chen Z, Chatzi L, Goodrich JA. Associations of dietary intake and PFAS concentrations in Hispanic young adults in the Meta-AIR cohort. ISEE North American Chapter, Corvallis, OR, 2023. *Poster presentation*.
45. Hampson H, Coffman M<sup>\*\*</sup>, Holzhausen EA<sup>\*\*\*</sup>, Chalifour B<sup>\*\*\*</sup>, Patterson W<sup>\*\*</sup>, Wang H, Baumert BO, Rock S, Valvi D, Jones DP, Goran MI, Gilliland FD, Conti DV, Walker DI, Chen Z, Chatzi L, **Alderete TL**, Goodrich JA. Associations of PFAS mixtures with the gut microbiome among young adults with overweight and obesity from the MetaAIR cohort. ISEE, Taiwan, 2023. *Oral presentation*.
46. Costello E, Goodrich JA, Walker DI, Hampson HE, Baumert BO, Beglarian E, Rock S, Gilliland FD, **Alderete TL**, Chen Z, McConnell R, Aung M, Conti DV, Chatzi L. Bottled water consumption and per- and polyfluorinated alkyl substances: Findings from the MetaAir Study and NHANES 2003-2018. ISEE, Taiwan, 2023. *Oral presentation*.
47. Chen JF, Goodrich J, Walker DI, Costello E, Liao J, **Alderete TL**, Valvi D, Baumert BO, Rock S, Jones DP, McConnell R, Eckel SP, Gilliland FD, Aung MT, Conti DV, Chen Z, Chatzi L. Exposure to per- and polyfluoroalkyl substances and plasma proteomics in young adults: The Meta-AIR study. ISEE, Taiwan, 2023. *Oral presentation*.
48. Beglarian E, Costello E, Walker DI, Wang H, **Alderete TL**, Chen Z, Valvi D, Baumert BO, Rock S, Rubbo B, Aung M, Gilliland FD, Goran MI, Jones DP, McConnell R, Eckel S, Conti DV, Goodrich JA, Chatzi L. Exposure to perfluoroalkyl substances and longitudinal changes in bone mineral density in adolescents and young adults: A Multi-Cohort Study. ISEE, Taiwan, 2023. *Oral presentation*.
49. Liao J, Chen W, Qiu C, Goodrich JA, Costello E, Chen CJ, **Alderete TL**, Chatzi L, Gilliland FD, Chen Z. Ambient air pollution and serum cardiometabolic proteome in young adults with obesity history. ISEE, Taiwan, 2023. *Oral presentation*.
50. Chalifour BN<sup>\*\*\*</sup>, Holzhausen EA<sup>\*\*\*</sup>, Yeo E<sup>\*\*</sup>, Shen N, Jones DP, Peterson BS, Goran MI, Liang D, **Alderete TL**. Infant feeding patterns, the fecal metabolome, and neurodevelopmental outcomes. Metabolomics among Latinos. Metabolomics 2023, Niagara Falls, Canada. *Oral presentation*.
51. Chalifour BN<sup>\*\*\*</sup>, Holzhausen EA<sup>\*\*\*</sup>, Yeo E<sup>\*\*</sup>, Shen N, Jones DP, Peterson BS, Goran MI, Liang D, **Alderete TL**. Infant feeding patterns, the fecal metabolome, and neurodevelopmental outcomes. Federation of American Societies for Experimental Biology: Origins and Benefits of Biologically Active Components in Human Milk Conference, Melbourne, Florida, USA, 2023. *Poster presentation*.
52. Holzhausen EA<sup>\*\*\*</sup>, Chalifour B<sup>\*\*\*</sup>, Shen N, Tran V, Li Z, Sarnat JA, Lurmann F, Chang HH, Jones DP, Goran MI, Liang D, **Alderete TL**. Proposing a potential mechanistic link between early life air pollution exposure and childhood obesity risk among Latinno. ISEE Conference Abstracts 2023, Taiwan. *Oral presentation*.
53. Patterson WB<sup>\*\*</sup>, Goodrich J, Tan Y, Holzhausen EA<sup>\*\*\*</sup>, Chalifour B<sup>\*\*\*</sup>, Costello E, Lurmann F, Chen Z, Liang D, Conti DV, Chatzi L, **Alderete TL**. Ozone exposure, untargeted metabolomics, microRNAs, and non-alcoholic fatty liver disease in Hispanic young adults, Metabolomics 2023, Niagara Falls, Canada. *Poster presentation*.
54. Shen N, Dunlop AL, Barr DB, Holzhausen H<sup>\*\*\*</sup>, Chalifour B<sup>\*\*\*</sup>, Hu Y, Tang Z, Panuwet P, Lee G, P. Ryan B, Corwin EJ, **Alderete TL**, Liang D. The impact of phthalate exposure on the gut microbiota of pregnant African American people in Atlanta, Georgia. ISES, Chicago, IL, 2023. *Oral presentation*.

55. Tang Z, Dunlop AL, Hu Y, Shen N, Holzhausen H\*\*\*, Chalifour B\*\*\*, Tang Y, Sarnat JA, **Alderete TL**, Liang D. Air pollution exposure and the maternal gut microbiome in early pregnancy: Implications for risk of preterm and early-term births among African Americans. ISES, Chicago, IL, 2023. *Oral presentation*.

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## **PUBLISHED ABSTRACTS, POSTERS, AND ORALS CURRENTLY UNDER REVIEW**

*\*Indicates undergraduate students, \*\*graduate students, or \*\*\*postdocs that are/were under the direct supervision of Dr. Alderete.*

56. Costello E, Goodrich JA, Patterson WB\*\*, Walker DI, Chen JC, Baumert O, Rock S, Gilliland FD, Chen Z, **Alderete TL**, Conti DV, Chatzi L. Metabolomic and proteomic signatures of diet quality. American Public Health Association (APHA), Atlanta, GA, 2023. *Under review*.
57. Li Y, Costello E, Stratakis N, Rock S, Patterson WB\*\*, Chen Z, Gilliland F, Goran MI, **Alderete TL**, Goodrich JA, Conti DV, Chatzi L. Ultra-processed food is associated with altered glucose homeostasis in young adults. American Public Health Association (APHA), Atlanta, GA, 2023. *Under review*.

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## **INVITED PRESENTATIONS**

### ***International***

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| 2015 | "Impact of dietary sugars on the gut-liver axis in obese Latino children". The Rank Prize Funds. <i>Mini-Symposium on Nutrition and Obesity</i> , Grasmere, United Kingdom.  |
| 2015 | "Increased sugary beverage consumption is related to alterations in the systemic microbiome of overweight and obese Hispanic children". <i>World Obesity Federation; Dietary Sugars, Obesity and Metabolic Disease Risk</i> , Berlin, Germany. |
| 2016 | "Longitudinal effects of ambient air pollution exposure on obesity and risk factors for type 2 diabetes in Los Angeles Latino children". <i>ISEE Annual Meeting</i> , Rome, Italy.   |
| 2018 | "Exposure to perfluoroalkyl substances and longitudinal alterations in glucose metabolism among overweight and obese Hispanic children: A metabolomics approach". <i>ISEE Annual Meeting</i> , Ottawa, Canada.                                 |
| 2023 | "Utilizing multiple omics measures to understand the impact of adverse environmental exposures on human health" Invited Keynote Speaker, <i>Grainau Meeting</i> , Germany, May 2023.   |

### ***National***

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| 2011 | "From undergrad to graduate school". <i>USC McNair Scholar's Program</i> , Los Angeles, California.   |
| 2012 | "Liver fat not visceral fat drives insulin resistance among obese African American and Hispanic youth with a greater impact of liver fat in African Americans". Ethan Sims Young Investigator Award Finalist, <i>The Obesity Society Annual Meeting</i> , San Antonio, Texas. |
| 2014 | "Life after the career development training program". <i>SC CTSI Career Development Seminar</i> , Los Angeles, California.  |
| 2016 | "Adverse effects of ambient air pollution exposure on obesity and risk factors for type 2 diabetes". <i>National Institute of Environmental Health Sciences FEST</i> , Durham, North Carolina.  |



- 2017 "Adverse effects of longitudinal ambient air pollution exposure on obesity and risk factors for type 2 diabetes in Los Angeles Latino children". *Academic Pediatric Association 14th Annual Environmental Health Scholars Retreat*, Arlington, Virginia.
- 2018 "Novel Risk factors for type 2 diabetes in overweight and obese youth", *Bioinformatics Research Meeting*, University of North Carolina at Charlotte, Charlotte, North Carolina.
- 2018 "Air pollution exposure, type 2 diabetes, and the gut microbiome". *Microbiome & Metabolomics Research Meeting*, University of California San Diego, San Diego, California.
- 2018 "Exposure to air pollutants and the composition of the gut microbiota in adolescents". Diabetes and Obesity Research (DORI) 5th Annual Research Symposium, Los Angeles, California.
- 2019 "Exposure to air pollutants and risk factors for type 2 diabetes in overweight and obese youth". *Lifecourse Epidemiology of Adiposity and Diabetes (LEAD) Center Seminar Series*, Colorado School of Public Health, University of Colorado Denver, Denver, Colorado.
- 2019 "Obesity and type 2 diabetes in children". *Health Effects Institute (HEI)*, Seattle, Washington.
- 2020 "Near-roadway and ambient air pollution exposure and the gut microbiome: Implications for obesity and type 2 diabetes" *National Jewish Medical Center*, Denver, Colorado.
- 2021 "The gut microbiome as a link between environmental exposures and human health", USC Center for Translational Research on Environmental Health, *University of Southern California and Children's Hospital of Los Angeles*, Los Angeles, California.
- 2021 "Environmental exposures and the human gut microbiome: Implications for obesity and type 2 diabetes", *NIEHS Xenobiotics and Microbiome Workshop (over 1,200 registered)*, Virtual Meeting.
- 2021 "Environmental exposures and the human gut microbiome across the lifecourse", University of Colorado Boulder, *Center for Microbial Exploration*, Boulder, Colorado.
- 2021 "Environmental exposures may impact the gut microbiome and influence the development of obesity and type 2 diabetes," *Icahn School of Medicine at Mount Sinai*, Virtual Meeting.
- 2021 "The gut microbiome: Connecting environmental exposures and human health", *University of Colorado Boulder, Integrative Physiology*, Reappointment Talk, Boulder, Colorado.
- 2021 "The gut microbiome, environmental exposures, and human health", *Colorado State University, Cell, and Molecular Biology (CMB)*, Virtual Meeting.
- 2022 "Project 1 - El Sendero: *Pathways to Health*", *Southern California Center for Latino Health Research Showcase & Reception*, Los Angeles, California.
- 2022 "The gut microbiome: Connecting environmental exposures and human health." Invited Seminar for California State University Northridge (CSUN), U-RISE and Bridges to the Ph.D. Seminar Series, Los Angeles, California.
- 2022 "Health Effects Institute: Rosenblith New Investigator Award progress update." *Seminar at the Health Effects Institute*, Seattle, Washington.
- 2022 "The gut microbiome: Connecting environmental exposures and human health." *University of Southern California (USC), Diabetes and Obesity Research Institute, and USC Grand Rounds*, Los Angeles, California.

- 2023 "Effects of exposure to air pollutants and PFAS on the gut microbiome: Implications for the developmental origins of chronic disease", *University of Colorado Boulder, Integrative Physiology, Boulder, Colorado*.
- 2023 "Effects of exposure to air pollutants and PFAS on the gut microbiome: Implications for human health across the lifecourse." *HERCULES Seminar Series, Emory University, Atlanta, Georgia*.
- 2023 "Effects of exposure to air pollutants and PFAS on the gut microbiome: Implications for the developmental origins of chronic disease." *Children's Hospital of Los Angeles, Annual Science Day Symposium, Los Angeles, California*.
- 2023 "Effects of exposure to air pollutants and PFAS on the gut microbiome: Implications for human health across the life course." *Michigan State University, Food Science and Human Nutrition, East Lansing, Michigan*.
- 2023 "Environmental Exposures and Their Lifelong Legacy: How Air Pollutants and PFAS Influence the Gut Microbiome and Impact Human Health." Boston University School of Public Health, Department of Epidemiology, Boston, Massachusetts.
- 2023 "Environmental Exposures: Air Pollutants, PFAS, and the Gut Microbiome in Early Life." Johns Hopkins University, Bloomberg School of Public Health, Baltimore, Maryland.

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## TRAINEE INVITED PRESENTATIONS

- 2019 "Exposure to ambient air pollutants and the composition of the gut microbiome in adolescents from Southern California." *Front Range Microbiome Symposium, Fort Collins, Colorado. Presented by Maximillian Bailey (Undergraduate Student)*.
- 2019 "Exposure to air pollutants and green space: Implications for the gut microbiome and fecal metabolome." *Reaching Diverse and Understudied Groups in Multimodal Studies. Aurora, Colorado. Presented by William Patterson (PhD Student)*.

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## SELECTED MEDIA RELATIONS/PUBLIC EDUCATION

- 2015 *The Scientist*  
"Breast milk and obesity: A study links components of a mother's milk to her infant's growth"
- 2018 *The Atlantic*  
"A frightening new reason to worry about air pollution"
- 2018 *The Guardian*  
"Childhood obesity linked to air pollution from vehicles"
- 2018 *Environmental Health Perspectives Science Selection*  
"Prelude to diseases? PM<sub>2.5</sub> and markers of diabetes risk in nondiabetic adults"
- 2017 *Keck School of Medicine New Release*  
"Air pollution linked to heightened risk of Type 2 diabetes in obese Latino children, study finds"
- 2017 *NBC News*  
"Study: air pollution is linked to diabetes in overweight Latino children"
- 2017 *Science Daily*  
"Air pollution is linked to heightened risk of type 2 diabetes in obese Latino children"
- 2019 *Welston Journal*  
"Diabetes in Latino kids linked to air pollution – research"
- 2020 *CU Boulder Today*  
"Can the brown cloud make you gain weight?"

- 2020 *Yahoo News*  
"Air pollution could cause obesity and chronic disease by changing the gut microbiome: study"
- 2020 *Science Daily*  
"Can poor air quality make you gain weight? Study shows pollution harms gut bacteria, contributes to diabetes, obesity"
- 2020 *CBS Denver Channel 4*  
"CU study: Denver area air pollution might increase obesity"
- 2020 *Children's Hospital of Los Angeles*  
"Sugary beverage and added sugar consumption during the postpartum period leads to greater weight gain and risk of obesity"
- 2021 *CU Boulder Today*  
"Student-led spring study shows high mask compliance on campus"
- 2021 *Fox Denver 31*  
"Study shows high mask compliance at CU Boulder"
- 2021 *CBS Denver Channel 4*  
"CDC study targets cu boulder campus for face mask compliance"
- 2021 *CU Boulder Today*  
"Air pollution exposure during pregnancy may boost babies' obesity risk"
- 2021 *CBS Denver Channel 7*  
"Air pollution and child obesity" – Live interview
- 2021 *National Public Radio – Colorado Public Radio*  
"Air pollution exposure during pregnancy and increased risk of obesity in children" – Live interview
- 2021 *KGNU Community Radio*  
"New CU study links air pollution to higher risk of obesity in Hispanic children – Live interview"
- 2022 *CBS Colorado*  
"Raising babies in polluted areas increases allergy, diabetes risk, Colorado study finds"
- 2022 *Denver7*  
"CU Boulder study looks at impact of air pollution"
- 2022 *9News*  
"Air pollution and the infant gut"
- 2022 *KGNU Community Radio*  
"Air pollution can be bad for your gut microbiome: CU scientist"
- 2022 *Colorado Sun*  
"Air pollution hurts baby "gut biome," Colorado study shows"
- 2022 *CU Boulder Radio 1190*  
"Effects of pollution on an infant's microbiome"
- 2023 *Colorado Arts and Sciences Magazine*  
"Vast majority of students were up for the mask"
- 2023 *CU Boulder Today*  
"Three years in: 7 things we've learned about COVID"
- 2023 *CU Boulder Today*  
"Breastfeeding shown to boost baby's brain and gut health"
- 2024 *Association of American Universities*

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## TEACHING CONTRIBUTIONS

### University Courses:

#### University of Colorado, Boulder, CO

2019	<b>IPHY2800</b> Introduction to Statistics (Spring) Professor, 51 undergraduate students
2020	<b>IPHY2800</b> Introduction to Statistics (Spring) Professor, 68 undergraduate students
2021	<b>IPHY3280</b> Introduction to Data Science (Spring) Professor, 75 undergraduate students
2022	<b>IPHY3280</b> Introduction to Data Science (Spring) Professor, 130 undergraduate students
2023	<b>IPHY5900</b> Data Literacy in Biomedical Research (Spring) Professor, 6 graduate students
2024	<b>IPHY3280</b> Introduction to Data Science (Spring) Professor, 180 undergraduate students

#### University of Southern California, Los Angeles, CA

2011	McNair Scholars Program. Teaching Assistant, Research Methods, 12 undergrad students.
2017	Speaker Keck Medical School. Toxicology Graduate Course. "Environmental exposures and risk factors for type 2 diabetes in overweight and obese youth".

#### California State University, Los Angeles, CA

2016	Speaker. Epidemiology Undergraduate Course. "Metabolic diseases and health disparities".
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### Advisory and Supervisory Responsibilities (Primary Mentor):

#### University of Colorado Boulder, Boulder, CO

##### Current and Past Undergraduate Trainees:

\*(HT) indicates result of undergraduate student honors thesis under supervision of Dr. Alderete

\*(UR) indicates result of undergraduate research opportunities program (UROP) under Dr. Alderete

\*(BSI) indicates results of Biological Sciences Initiative under Dr. Alderete

2018 – 2020	Maximillian Bailey, Undergraduate Research Assistant <b>*(UR) and McNair Scholar</b>
2018 – 2020	Laura Wild, Undergraduate Research Assistant
2019 – 2020	Savannah Mierau, Undergraduate Research Assistant <b>*(UR)</b>
2019 – 2022	Noopur Naik, Undergraduate Research Assistant <b>*(HT) *(UR)</b>
2019 – 2021	Zach Morgan, Undergraduate Research Assistant <b>*(UR)</b>
2020 – 2022	Didi Trifonova, Undergraduate Research Assistant <b>*(BSI)</b>
2020 – 2021	Bailey Cox, Undergraduate Research Assistant <b>*(UR)</b>
2021 – 2022	Laynie Powell, Undergraduate Research Assistant <b>*(UR)</b>
2021 – 2022	Wacim Benyoucef, Undergraduate Research Assistant <b>*(UR)</b>
2022 – 2023	Joseph JoonSub Lim, Undergraduate Research Assistant <b>(UR)</b>
2022 – Present	Gabby Kraemer, Undergraduate Research Assistant

2023 – Present DJ (Dongjay) Park, Undergraduate Research Assistant

**Current and Past Post-Baccalaureate Trainees:**

2019 – 2020 Jessica Glasson, Postbaccalaureate Program  
2020 – 2021 Kevin Clark, Postbaccalaureate Program  
2021 – 2022 Joseph Cleveland III, Postbaccalaureate Program  
2022 – Present Zach Stieneker, Postbaccalaureate Program  
2023 – Present Charlotte Haslett, Postbaccalaureate Program  
2023 Alex Frech, Postbaccalaureate Program  
2023 – Present Levi Stone, Postbaccalaureate Program

**Current and Past Graduate Trainees:**

2019 – present William Patterson, Ph.D. Dissertation Primary Mentor  
2020 – 2022 Maximillian Bailey, Master's Thesis Primary Mentor  
2021 – 2022 Zach Morgan, Master's Thesis Primary Mentor  
2021 – 2023 Kevin Clark, Master's Thesis Primary Mentor  
2021 – 2023 Niki Konstantinides, Ph.D. Dissertation Primary Mentor  
2022 – 2024 Maria Coffman, Master's Thesis Primary Mentor  
2022 – 2024 Emily Yeo, Ph.D. Dissertation Primary Mentor  
2023 – Present Joseph JoonSub Lim, Master's Thesis Primary Mentor (UR)

**Committee Membership (Not Primary Mentor):**

2020 – 2023 T32 Mentoring Team (Primary Mentor: Kenneth Wright) and Ph.D. Committee Member for Dana Withrow  
2020 Member of Master's Research Project Committee for Samuel Bennion, MS in Integrative Physiology  
2020 Member of Dissertation Committee for Marko Melnick, Ph.D. in Integrative Physiology (Primary Mentor: Chris Link)  
2021 Member of Master's Research Project Committee for Nathan Greenberg, MS in Integrative Physiology  
2021 Member of Master's Research Project Committee for David Hutton, MS in Integrative Physiology  
2021 Member of Master's Research Project Committee for Jeremie Kautzmann, MS in Integrative Physiology  
2021 Member of Master's Research Project Committee for Narissa McCarty, MS in Integrative Physiology  
2021 Member of Master's Research Project Committee for Aidan McQuade, MS in Integrative Physiology  
2021 Member of Master's Research Project Committee for Annie Waddle, MS in Integrative Physiology  
2021 – 2023 Member of Master of Public Health Committee for Karina Barragan at California State University Northridge (Primary Mentor: Claudia Toledo-Corral)

2023	Member of Dissertation Committee for Hannah K. Fandl, Ph.D. in Integrative Physiology (Primary Mentor: Christopher DeSouza)
2023 – present	Member of Dissertation Committee for Nathan Greenberg, PhD in Integrative Physiology (Primary Mentor: Douglas Seals)
2023	Member of Master's Research Project Committee for McKinley Coppock, MS in Integrative Physiology
2023	Member of Master's Research Project Committee for Makenna Hemmerle, MS in Integrative Physiology
2023	Member of Master's of Public Health Thesis Committee for Applied Epidemiology Karina J. Barragan (California State University Northridge)

#### **Current/Past Postdoctoral Trainees:**

2020 – 2021	Farnaz Fouladi, Ph.D. (co-mentor)
2020 – 2021	Elham Kazemian, Ph.D. (co-mentor)
2021 – Present	Elizabeth Holzhausen, Ph.D. (primary mentor)
2022 – Present	Bridget Chalifour, Ph.D. (primary mentor)

#### **University of Southern California, Los Angeles, CA**

##### **Past Trainees:**

\*(MP) indicates result of master's practicum under supervision of Dr. Alderete

2014	Kimberly Chen, <b>*(MP)</b> Master's Public Health Practicum. "Targeting adipose tissue inflammation in obese Hispanic young adults".
2015	Benjamin Brekke, <b>*(MP)</b> Master's Public Health Practicum. "Breast milk and infant growth and body composition".
2015	Karren Wong, <b>*(MP)</b> , Master's Public Health. "Metabolic effects of air pollution exposure".
2015 – 2016	Jeffery Cruz, <b>*(MP)</b> University of Southern California, Master's Public Health, "Air pollution exposure and the gut microbiome".
2016	Kelly Liu, <b>*(MP)</b> Master's Public Health in Biostatistics, "Systemic markers of inflammation and ambient air pollution exposure in Latinos".
2023	Hailey, PhD Qualifying Exam Committee Member, ""
2023	Liz Costello, PhD Qualifying Exam Committee Member, "Molecular mechanisms and young-onset type 2 diabetes: integration of diet and multi-omics assessments."
2023	Jiawen Carmen Chen, PhD Qualifying Exam Committee Member, "Persistent Organic Pollutants, Oxidative Stress, and Cardiometabolic Health in Hispanic Youth - A High-dimensional Proteomics Analysis."

#### **Emory University, Rollins School of Public Health**

2022 – 2023	Natalie Shen, MPH Student, Field Supervisor for Emory Rollins School of Public Health (RSPH) Applied Practice Experience (APE) Program, "Impact of Prenatal Air Pollution Exposure on the Fecal Microbiome and Metabolome of Latino Infants from Southern California".
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**Past Post-Baccalaureate Trainees:**

2012 – 2013                      Preeya Desai, “Liver Fat and Risk for Type 2 Diabetes in Minority Youth”.

**Supervised Trainees (Not Primary Mentor):**

2015 – 2019                      Jeniffer Kim (USC Environmental Health), Ph.D. Thesis Mentor.

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**SERVICE CONTRIBUTIONS**
**University of Colorado Boulder, Boulder, CO**

2018                              Undergraduate Research Opportunities Program (UROP) Symposium, Host of Integrative Physiology Interest Table

2018 – 2019                      Health Professional Residential Academic Program (seminar series/lab tours)

2018 – 2020                      Ad-hoc Primary Unit Evaluation Committee

2018 – present                      Center for Microbial Exploration (CME) Core Faculty Member

2018 – 2022                      BioFrontiers Council Member

2019                              McNair Scholar 3MT Competition Judge

2019 – 2020                      IPHY Search Committee (Tenure-Track Assistant Professor)

2019 – 2020                      University of Colorado Boulder, Student Government, Diversity, and Inclusion Faculty Advisor

2019 – present                      Founder and Co-Director of Promoting integrative Collaboration and Science (PiCS) Meetings

2019 – present                      Public Health Certificate Committee Member

2019 – present                      Member of Colorado Consortium for Air Pollution, Climate Change, and Health

2019 – 2022                      Integrative Physiology Undergraduate Research Symposium Committee

2019 – present                      Annual McNair Scholar Application Review Committee and Faculty Advisor

2019 – present                      Integrative Physiology Statistics Course Committee

2019 – present                      Colorado Nutrition Obesity Research Center (NORC) Member

2019 – 2021                      Faculty Advisory Committee for Boulder-Anschutz Research Collaboration

2020 – present                      University of Colorado, Cardiovascular Institute (CU-CVI) Associate Investigator

2020 – present                      Department of Integrative Physiology Executive Committee (EC) Member

2020 – present                      University of Colorado Boulder Institutional Review Board (IRB) Member

2022 – 2023                      IPHY Search Committee (Tenure-Track Assistant Professor, Computational and DEI)

2023 – present                      IPHY Committee on Comprehensive Review, Promotion, and Tenure (CRPT) Criteria

2023 – present                      Faculty Member of Postbaccalaureate Committee Letter Interview

**National:****Mount Sinai School of Medicine, New York City, NY**

2018                              Grant Reviewer, NIEHS P30, Mount Sinai Transdisciplinary Center on Early Environmental Exposures

2023 Grant Reviewer, NIEHS P30, Mount Sinai Transdisciplinary Center on Early Environmental Exposures

**Puerto Rico Science, Technology, & Research Trust**

2019 Grant Reviewer, Advanced Research Grant (ARG) Proposals

**University of Colorado Boulder**

2020 Grant Reviewer, Research, and Innovation Seed Grant

**NIH Environmental Influences on Child Health Outcomes (ECHO) Program**

2018 – 2023 ECHO Microbiome Task Force Member

**International Society for Environmental Epidemiology (ISEE)**

2019 – present ISEE Communications Committee Member

2021 ISEE Student & New Researcher Network (SNRN), Transitioning to a Postdoc Panel Session

2022 – present ISEE Communications Committee Co-Chair

**Centers for Disease Control and Prevention (CDC)**

2021 Site PI for the CDC MASCUP (Mask Adherence Surveillance at Colleges and Universities) Study

**National Institutes of Health (NIH)**

2020 – present NIH Early Career Reviewer (ECR) Program

2022 NIH/CSR Special Emphasis Panel (SEP) – Social and Environmental Determinants of Cancer and Cardiovascular Disease

2023 NIH/NIMHD Special Emphasis Panel (SEP) – Research Centers in Minority Institutions (RCMI) (U54 Clinical Trials Optional)

**University of Washington**

2023 Diabetes Research Center, Stroum Graduate Fellowship

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**MEMBERSHIPS IN PROFESSIONAL SOCIETIES**

2012 – 2013 Member, American Diabetes Association (ADA)

2008 – 2014 Member, The Obesity Society (TOS)

2014 – present Member, International Society for Environmental Epidemiology (ISEE)

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**PROFESSIONAL DEVELOPMENT**

2018 – present Faculty Teaching Excellence Program (FTEP)

2018 – present Principal Investigator (PI) Academy

2019 Active Learning Academy, Learning by Design Program (Fall Semester)  
Funded by NSF and supported by the Center for Teaching at Learning

2019 Scientific Communication Advances Research Excellence (SCOARE) 1-day Mentor Workshop

2019 Leadership Education for Advancement and Promotion (LEAP) 2-day Workshop

2021 Online Teaching Academy for Summer 2021  
Supported by the Center for Teaching at Learning



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## EDITORIAL AND PEER-REVIEW SERVICE

### **Editorial Activities**

2019 – 2021	Editorial Board Member, <i>Scientific Reports</i>
2019 – 2023	Review Editor, <i>Frontiers in Global Reproductive Health – Reproductive Epidemiology</i>
2020 – 2022	Guest Editor, <i>International Journal of Environmental Research and Public Health</i> , Special Issue “Childhood Obesity: Physiology and Behavior”
2021 – 2022	Guest Editor, <i>Frontiers</i> , “Environmental Pollution and the Human Microbiota in Health and Disease”
2022	Guest Editor, <i>International Journal of Environmental Research and Public Health</i> , Special Issue “ISEE Commentaries”

### **Publication Committees**

2023	Health Equity Action Network (HEAN) Publication Committee
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### **Ad Hoc Journal Reviewer (Selection)**

*Advanced Science, Air Quality, American Journal of Clinical Nutrition, Atmosphere and Health, Cell Reports Medicine, Diabetes Research and Clinical Practice, Environmental Health Perspectives, Environmental International, Environmental Pollution, Environmental Research, International Journal of Obesity, Pediatric Obesity, PLOS Medicine, Scientific Reports, Environmental Science & Technology.*