



## Andres Cardenas

Assistant Professor of Epidemiology and Population Health and, by courtesy, of Pediatrics

### CONTACT INFORMATION

- **Administrative Contact**

Alex Garcialuna - Administrative Associate

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### Bio

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#### BIO

I am an environmental epidemiologist and serve as an Assistant Professor in the Department of Epidemiology and Population Health at Stanford University. I joined the faculty at Stanford School of Medicine in 2022.

My research focuses on characterizing molecular and epigenetic biomarkers and the extent to which these alterations contribute to disease risk throughout the life course. My group utilizes computational approaches to investigate environmental chemical mixtures, biological aging markers and fetal epigenetic programming. We have several studies looking at chemical and non-chemical stressors in early-life and subsequent health including; neurodevelopment, obesity and immune function.

My research examines the intersection of chemical and social environments in shaping health and disease.

#### ACADEMIC APPOINTMENTS

- Assistant Professor, Epidemiology and Population Health
- Assistant Professor (By courtesy), Pediatrics
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)

#### HONORS AND AWARDS

- Outstanding New Environmental Scientist (ONES) award, NIEHS/NIH (2020-2025)
- Young Alumni Award, College of Science, Oregon State University (2020)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Affiliate, Stanford Center for Human and Planetary Health (2025 - present)

#### LINKS

- Publications: <https://www.ncbi.nlm.nih.gov/myncbi/andres.cardenas.1/bibliography/public/>

- NIH Grants: [https://reporter.nih.gov/search/\\_OxjRyeTAKqj-MIHUAu49A/projects](https://reporter.nih.gov/search/_OxjRyeTAKqj-MIHUAu49A/projects)
- My Lab Site: <https://med.stanford.edu/cardenas-lab.html>
- X: <https://twitter.com/cardenaasca>

## Teaching

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### COURSES

#### 2025-26

- Epidemiology Research Seminar: EPI 236 (Win)
- Human Health and the Environment: EPI 248 (Spr)

#### 2024-25

- Epidemiology Research Seminar: EPI 236 (Win)

### STANFORD ADVISEES

#### Postdoctoral Faculty Sponsor

Ixel Hernandez, Amy Inkster, Dennis Khodasevich, Dayoon Kwon, Javier Perez Garcia, Anna Smith

#### Doctoral Dissertation Advisor (AC)

Isabella Gandara

#### Master's Program Advisor

Yuewei Ling

#### Doctoral (Program)

Isabella Gandara

### GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Epidemiology (Masters Program)
- Epidemiology (Phd Program)
- Genetics (Phd Program)

## Publications

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### PUBLICATIONS

- **The environmental chemical exposome and health insurance: Examining associations and effect modification of epigenetic aging in a representative sample of United States adults.** *Exposome*  
Nwanaji-Enwerem, J. C., Khodasevich, D., Gladish, N., Shen, H., Bozack, A. K., Daredia, S., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2026; 6 (1): osaf015
- **Dental caries linked to gestational and early-life secondhand smoke exposure.** *Journal of dentistry*  
Patil, S. S., Cardenas, A., Pillarsetti, A., Steenland, K., Patil, S. S., Nuvvula, S. K., Navilebasappa, A., Ghosh, S., Balakrishnan, K., Waller, L. A., Jabbarzadeh, S., Peel, J., Clasen, et al  
2026: 106743
- **Do epigenetic aging biomarkers mediate the association between exposure and health outcomes? A scoping review of mediation analysis.** *Environmental research*  
Fujii, R., Tsuboi, Y., Cardenas, A., Okuzono, S. S., Valeri, L., Yamada, H., Yamazaki, M., Okumiyama, H., Murakami, K., Umematsu, R., Suzuki, K.  
2026: 124600
- **Associations of mid-childhood per- and polyfluoroalkyl substances and early childhood metals with mid-childhood antibody titers** *ENVIRONMENTAL EPIDEMIOLOGY*

- Smith, A., Lin, P. D., Rifas-Shiman, S. L., Gold, D. R., Fleisch, A. F., Hivert, M., Oken, E., Cardenas, A.  
2026; 10 (2)
- **Associations of mid-childhood per- and polyfluoroalkyl substances and early childhood metals with mid-childhood antibody titers.** *Environmental epidemiology (Philadelphia, Pa.)*  
Smith, A., Lin, P. D., Rifas-Shiman, S. L., Gold, D. R., Fleisch, A. F., Hivert, M. F., Oken, E., Cardenas, A.  
2026; 10 (2): e471
  - **Arsenic exposure at birth, socioeconomic status, and epigenetic aging among adults in northern Chile.** *Environmental research*  
Kwon, D., Bozack, A. K., Ferreccio, C., McCormick, N., Steinmaus, C. M., de la Rosa, R., Cardenas, A.  
2026: 124377
  - **Aging Out of the Blue: Region-Specific Epigenetic Clock Calibration for a Blue Zone with the DNAm SuperLearner.** *medRxiv : the preprint server for health sciences*  
Gunter, N., Cardenas, A., Kobor, M., Gladish, N., Rehkopf, D., Dow, W., Rosero-Bixby, L., Hubbard, A.  
2026
  - **Prospective Associations of PFAS with Cardiovascular Disease in Prediabetes: Diabetes Prevention Program**  
Lin, P., Cardenas, A., Temprosa, M., Botelho, J., Calafat, A., Gold, D., Oken, E., Fleisch, A.  
LIPPINCOTT WILLIAMS & WILKINS.2026
  - **Social support and epigenetic aging at the intersections of race, ethnicity, and gender: findings from NHANES 1999-2002.** *SSM - population health*  
Shen, H., Gladish, N., Cardenas, A., Needham, B. L., Rehkopf, D. H.  
2026; 33: 101892
  - **Social support and epigenetic aging at the intersections of race, ethnicity, and gender: findings from NHANES 1999-2002** *SSM-POPULATION HEALTH*  
Shen, H., Gladish, N., Cardenas, A., Needham, B. L., Rehkopf, D. H.  
2026; 33
  - **Interplay of the nasal microbiome and epigenome among adolescents.** *Clinical epigenetics*  
Bozack, A. K., Perez-Garcia, J., Rifas-Shiman, S., Zhou, Y., Sordillo, J., Lee, J. J., Coull, B., Lai, P. S., Oken, E., Hivert, M. F., Gold, D. R., Cardenas, A.  
2026
  - **Association of depressive and/or pregnancy-related anxiety symptoms in pregnancy with maternal and neonatal biologic aging.** *BMC pregnancy and childbirth*  
Panelli, D. M., Bianco, K., L Rifas-Shiman, S., Oken, E., Hivert, M. F., Hernandez-Castro, I., Shaw, G. M., Cardenas, A.  
2026
  - **Multi-tissue DNA methylation analysis to identify an appropriate surrogate tissue for a unique neurological tissue specific to spina bifida.** *Clinical epigenetics*  
Tindula, G., Mukherjee, S. K., Ekramullah, S. M., Arman, D. M., Islam, J., Biswas, S. K., Rahman, M. N., Ziauddin, M., Ahmed, A. U., Suchanda, H. S., Warf, B. C., Christiani, D. C., Lemos, et al  
2026
  - **Associations of arsenic exposure and folate in maternal leukocyte DNA methylation: a case-control study of mothers with spina-bifida affected children.** *Environmental health : a global access science source*  
Inkster, A. M., Bozack, A. K., Lemos, B., Lumour-Mensah, T., Mukherjee, S. K., Ekramullah, S. M., Arman, D. M., Islam, J., Wang, X., Liang, L., Finnell, R. H., Mazumdar, M., Cardenas, et al  
2026
  - **Epigenome-wide association study of household air pollution exposure in an area with high lung cancer incidence.** *Environmental research*  
Rahman, M. L., Portengen, L., Blechter, B., Breeze, C. E., Wong, J. Y., Hu, W., Downward, G. S., Zhang, Y., Cardenas, A., Ning, B., Li, J., Yang, K., Hosgood, et al  
2026: 123690
  - **Association of depressive and/or pregnancy-related anxiety symptoms in pregnancy with maternal and neonatal biologic aging** *BMC Pregnancy and Childbirth*  
Panelli, D. M., Bianco, K., Rifas-Shiman, S. L., Oken, E., Hivert, M., Hernandez-Castro, I., Shaw, G. M., Cardenas, A.

2026

- **Association of Smoking Behavior, Intensity, and Time Since Cessation with Epigenetic Aging Biomarkers: Results from NHANES 1999-2002.** *medRxiv : the preprint server for health sciences*  
Perez-Garcia, J., Khodasevich, D., Bozack, A. K., Rice, M. B., Nwanaji-Enwerem, J. C., Gladish, N., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025
- **Associations of Perfluoroalkyl and Polyfluoroalkyl Substances With Cardiovascular Disease Incidence in Adults With Prediabetes: Findings From the Diabetes Prevention Program.** *Journal of the American Heart Association*  
Lin, P. D., Cardenas, A., Temprosa, M., Botelho, J. C., Calafat, A. M., Gold, D. R., Oken, E., Fleisch, A. F.  
2025: e046298
- **Dietary fatty acids and epigenetic aging in US adults: results from the National Health and Nutrition Examination Survey.** *npj aging*  
Bozack, A. K., Khodasevich, D., Nwanaji-Enwerem, J. C., Gladish, N., Shen, H., Daredia, S., Needham, B. L., Rehkopf, D. H., Guasch-Ferre, M., Cardenas, A.  
2025
- **Blood transcriptomic associations of epigenetic age in adolescents.** *Epigenetics*  
Khodasevich, D., Bozack, A. K., Daredia, S., Deardorff, J., Harley, K. G., Eskenazi, B., Guo, W., Holland, N., Cardenas, A.  
2025; 20 (1): 2503824
- **The Nasal Microbiome and Associations With Environmental Exposures and Respiratory Health.** *Allergy*  
Perez-Garcia, J., Bozack, A. K., Rifas-Shiman, S. L., Zhou, Y., Sordillo, J., Coull, B., Luttmann-Gibson, H., Schwartz, J., Hivert, M. F., Oken, E., Gold, D. R., Cardenas, A.  
2025
- **DNA methylation-predicted protein differences between Yakutian and Central Russian populations.** *Epigenomics*  
Nwanaji-Enwerem, J. C., Khodasevich, D., Cardenas, A.  
2025: 1-8
- **Cumulative Epigenetic Aging From Birth to Young Adulthood and Prospective Associations With Cardiometabolic Health in the CHAMACOS Study.** *Journal of the American Heart Association*  
Daredia, S., Riddell, C. A., Khodasevich, D., Bozack, A. K., Harley, K. G., Kogut, K. R., Mora, A. M., Holland, N., Eskenazi, B., Deardorff, J., Cardenas, A.  
2025: e043818
- **DNA methylation age deviation and cognitive status among older adults in the US, NHANES 1999-2002.** *medRxiv : the preprint server for health sciences*  
Walker, E., Cockell, S., Needham, B. L., Cardenas, A., Park, S. K., Bakulski, K. M.  
2025
- **Associations of epigenetic age acceleration in adults and chronic respiratory diseases**  
Perez-Garcia, J., Khodasevich, D., De Matteis, S., Rice, M. B., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
EUROPEAN RESPIRATORY SOC JOURNALS LTD.2025
- **Nasal microbiome diversity and composition are associated with respiratory health in adolescents**  
Perez-Garcia, J., Bozack, A., Rifas-Shiman, S. L., Coull, B., Luttmann-Gibson, H., Schwartz, J., Hivert, M., Oken, E., Gold, D. R., Cardenas, A.  
EUROPEAN RESPIRATORY SOC JOURNALS LTD.2025
- **The leukocyte epigenome is associated with salivary bacteria involved in asthma exacerbations**  
Castillo-Vargas, E., Martin-Almeida, M., Martin-Gonzalez, E., Gonzalez-Perez, R., Hernandez-Perez, J. M., Sardon-Prado, O., Poza-Guedes, P., Mederos-Luis, E., Corcuera-Elosegui, P., Sanchez-Machin, I., Lopez-Fernandez, L., Villar, J., Cardenas, et al  
EUROPEAN RESPIRATORY SOC JOURNALS LTD.2025
- **Associations of Metal Mixtures During Early Pregnancy With Midlife Obesity and Body Composition: A Prospective Study.** *Obesity (Silver Spring, Md.)*  
Zhang, M., Aris, I. M., Cardenas, A., Rifas-Shiman, S. L., Lin, P. D., Ngo, L. H., Oken, E., Juraschek, S. P., Hivert, M. F.  
2025
- **Associations of maternal neighborhood and trauma-related stressors with mitochondrial DNA copy number and telomere length in maternal and cord blood.** *Scientific reports*

- Hernandez-Castro, I., Rifas-Shiman, S. L., Panelli, D. M., Smith, A. R., Yi, L., Aris, I. M., Tiemeier, H., Belfort, M. B., Qureshi, F., Gold, D. R., Hivert, M., Oken, E., Cardenas, et al  
2025; 15 (1): 29143
- **Dietary Fatty Acids and Epigenetic Aging in US Adults: Results from the National Health and Nutrition Examination Survey.** *medRxiv : the preprint server for health sciences*  
Bozack, A., Khodasevich, D., Nwanaji-Enwerem, J. C., Gladish, N., Shen, H., Daredia, S., Needham, B. L., Rehkopf, D. H., Guasch-Ferre, M., Cardenas, A.  
2025
  - **Placental DNA methylation key topics: sex- and cell-type specificity, mediation, multi-omics, and biomarker discovery.** *Epigenomics*  
Cohen, N. J., Lasseur, C., Cardenas, A., Ward-Caviness, C. K., Spring, A. C., Rager, J. E., Fry, R. C., Eaves, L. A.  
2025: 1-17
  - **Mitochondrial DNA Copy Numbers and Lung Cancer: A Systematic Review and Meta-Analysis.** *International journal of molecular sciences*  
Chiavarini, M., Dolcini, J., Firmani, G., Brennan, K. J., Cardenas, A., Baccarelli, A. A., Barbadoro, P.  
2025; 26 (14)
  - **Longitudinal Epigenetic Aging in Pregnancy and Associations With Adverse Outcomes.** *Obstetrics and gynecology*  
Panelli, D. M., Gladish, N., Perlman, N. C., Leonard, S. A., Chueh, J., Gotlib, I. H., Cardenas, A., Bianco, K.  
2025
  - **Higher fat-soluble vitamin and phosphorus intake are associated with less dental caries among children and adolescents in the United States, NHANES 2011–2018** *Frontiers in Oral Health*  
Khan, D., Hernandez-Castro, I., Larvie, D. Y., Armah, S. M., Cardenas, A., Malin, A. J.  
2025: 1617695
  - **Health insurance and epigenetic aging: Trends in a United States adult population.** *SSM - population health*  
Nwanaji-Enwerem, J. C., Khodasevich, D., Gladish, N., Shen, H., Daredia, S., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025; 30: 101806
  - **One-carbon metabolism-related compounds are associated with epigenetic aging biomarkers: Results from the cross-sectional National Health and Nutrition Examination Survey (NHANES) 1999-2002.** *The American journal of clinical nutrition*  
Bozack, A., Khodasevich, D., Nwanaji-Enwerem, J. C., Gladish, N., Shen, H., Daredia, S., Gamble, M., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025
  - **Association of prenatal and early life polycyclic aromatic hydrocarbons exposure with dental caries in childhood.** *Environmental research*  
Patil, S. S., Puttaswamy, N., Pillarisetti, A., Cardenas, A., Steenland, K., Patil, S. S., Saidam, S., Bharadwaj, R., Balakrishnan, K., Waller, L. A., Peel, J., Clasen, T., Barr, et al  
2025: 122021
  - **Epigenetic Age among U.S. Adults with Chronic Respiratory Diseases: Results from NHANES 1999-2002.** *The European respiratory journal*  
Perez-Garcia, J., Khodasevich, D., De Matteis, S., Rice, M. B., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025
  - **Sensory impairments and epigenetic aging: insights from self-rated hearing and vision in United States adults.** *GeroScience*  
Nwanaji-Enwerem, J. C., Khodasevich, D., Gladish, N., Shen, H., Bozack, A. K., Daredia, S., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025
  - **Associations of epigenetic aging with self-rated health, access to care, and healthcare utilization in a representative sample of United States adults.** *Clinical epigenetics*  
Nwanaji-Enwerem, J. C., Khodasevich, D., Gladish, N., Shen, H., Bozack, A. K., Daredia, S., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025; 17 (1): 80
  - **Sex-Specific Associations between Per- and Polyfluoroalkyl Substance Exposure and Epigenetic Age: Findings from the National Health and Nutrition Examination Survey 1999-2000.** *Environmental research*  
Khodasevich, D., Bozack, A. K., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025: 121827
  - **Influence of race, ethnicity, and sex on the performance of epigenetic predictors of phenotypic traits.** *Clinical epigenetics*

- Khodasevich, D., Gladish, N., Daredia, S., Bozack, A. K., Shen, H., Nwanaji-Enwerem, J. C., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025; 17 (1): 59
- **Associations of metal mixtures in early pregnancy with lung function and asthma in mid-childhood in Project Viva.** *American journal of epidemiology*  
Thilakaratne, R., Lin, P. D., Rifas-Shiman, S. L., Wright, R. O., Bradshaw, P. T., Balmes, J. R., Gold, D. R., Hubbard, A., Oken, E., Cardenas, A.  
2025
  - **Epigenome-wide association study of household air pollution exposure in an area with high lung cancer incidence.** *medRxiv : the preprint server for health sciences*  
Rahman, M. L., Portengen, L., Blechter, B., Breeze, C. E., Wong, J. Y., Hu, W., Downward, G. S., Zhang, Y., Cardenas, A., Ning, B., Li, J., Yang, K., Hosgood, et al  
2025
  - **An assessment of organophosphate ester mixtures and the placental transcriptome.** *Environment international*  
Lapehn, S., Parenti, M., Firsick, E. J., Khodasevich, D., Baker, B. H., Day, D. B., MacDonald, J. W., Bammler, T. K., Kannan, K., Choi, H. Y., Barrett, E. S., Howe, C. G., Carroll, et al  
2025; 198: 109402
  - **Comparing Veteran and Nonveteran Epigenetic Aging in a Representative Sample of United States Adults.** *Military medicine*  
Nwanaji-Enwerem, J. C., Khodasevich, D., Gladish, N., Shen, H., Daredia, S., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025
  - **Immigrant status and citizenship relationships with epigenetic aging in a representative sample of United States adults.** *Epigenomics*  
Nwanaji-Enwerem, J. C., Rodriguez Espinosa, P., Khodasevich, D., Gladish, N., Shen, H., Bozack, A. K., Daredia, S., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025: 1-8
  - **Chemical and Climatic Environmental Exposures and Epigenetic Aging: a Systematic Review.** *Environmental research*  
Fadadu, R., Bozack, A. K., Cardenas, A.  
2025: 121347
  - **Pregnancy Metal Mixtures and Blood Pressure and Hypertension in Mid-Life: A Prospective U.S. Cohort Study.** *Hypertension (Dallas, Tex. : 1979)*  
Zhang, M., Aris, I. M., Cardenas, A., Rifas-Shiman, S. L., Lin, P. D., Ngo, L. H., Oken, E., Hivert, M., Juraschek, S. P.  
2025
  - **Timing of menarche and menopause and epigenetic aging among U.S. adults: results from the National Health and Nutrition Examination Survey 1999-2002.** *Clinical epigenetics*  
Daredia, S., Khodasevich, D., Gladish, N., Shen, H., Nwanaji-Enwerem, J. C., Bozack, A. K., Needham, B. L., Rehkopf, D. H., Dearthoff, J., Cardenas, A.  
2025; 17 (1): 31
  - **Methylation Biomarkers of Lung Cancer Risk: A Systematic Review and Meta-Analysis.** *Cancers*  
Dolcini, J., Chiavarini, M., Firmani, G., Brennan, K. J., Cardenas, A., Baccarelli, A. A., Barbadoro, P.  
2025; 17 (4)
  - **Exposome-wide association study of environmental chemical exposures and epigenetic aging in the national health and nutrition examination survey.** *Aging*  
Khodasevich, D., Gladish, N., Daredia, S., Bozack, A. K., Shen, H., Nwanaji-Enwerem, J. C., Needham, B. L., Rehkopf, D. H., Cardenas, A.  
2025; 17
  - **A SuperLearner-based pipeline for the development of DNA methylation-derived predictors of phenotypic traits.** *PLoS computational biology*  
Khodasevich, D., Holland, N., van der Laan, L., Cardenas, A.  
2025; 21 (2): e1012768
  - **Long-term exposure to ambient air pollution and epigenetic age acceleration in children.** *American journal of epidemiology*  
Ni, W., Bozack, A. K., Rifas-Shiman, S. L., Oken, E., Hivert, M. F., Nassikas, N. J., Sordillo, J., Perng, W., Gold, D. R., Cardenas, A., Rice, M. B.  
2025
  - **Longitudinal leucocyte DNA methylation changes in Mesoamerican nephropathy.** *Environmental epigenetics*

Oomatia, A., Chervova, O., Al-Rashed, A. M., Smpokou, E., Ecker, S., Pearce, N., Heggeseth, B., Nitsch, D., Cardenas, A., Beck, S., Gonzalez-Quiroz, M., Caplin, B.  
2025; 11 (1): dvaf001

- **Early-life exposure to secondhand smoke and polycyclic aromatic hydrocarbons: associations with epigenetic aging among children** *ENVIRONMENTAL EPIGENETICS*  
Patil, S. S., Bozack, A. K., Pillarisetti, A., Patil, S. S., Steenland, K., Balakrishnan, K., Waller, L. A., Jabbarzadeh, S., Peel, J., Clasen, T. F., Barr, D., Puttaswamy, N., Cardenas, et al  
2025; 11 (1): dvaf030
- **Editorial: Environmental risk factors in noncommunicable diseases: new insights into the molecular mechanisms.** *Frontiers in public health*  
Pizent, A., Cardenas, A., Minguez-Alarcon, L.  
2025; 13: 1632200
- **Prenatal per- and polyfluoroalkyl substance exposures and DNA methylation among newborns in the Environmental influences on Child Health Outcomes program** *ENVIRONMENTAL EPIGENETICS*  
Schrott, R., Ladd-Acosta, C., Padmanabhan, V., Barr, D., Breton, C., Cardenas, A., Carignan, C. C., Dabelea, D., Dunlop, A. L., Fallin, D. M., Hivert, M., Howerton, E. M., Knight, et al  
2025; 11 (1): dvaf010
- **Timing of Menarche and Menopause and Epigenetic Aging among U.S. Adults: Results from the National Health and Nutrition Examination Survey 1999-2002.** *medRxiv : the preprint server for health sciences*  
Daredia, S., Khodasevich, D., Gladish, N., Shen, H., Nwanaji-Enwerem, J. C., Bozack, A. K., Needham, B. L., Rehkopf, D. H., Deardorff, J., Cardenas, A.  
2024
- **Parental arsenic exposure and tissue-specific DNA methylation in Bangladeshi infants with spina bifida.** *Epigenetics*  
Tindula, G., Mukherjee, S. K., Ekramullah, S. M., Arman, D. M., Islam, J., Biswas, S. K., Warf, B. C., Christiani, D. C., Lemos, B., Liang, L., Cardenas, A., Mazumdar, M.  
2024; 19 (1): 2416345
- **Associations of PFAS concentrations during pregnancy and midlife with bone health in midlife: Cross-sectional and prospective findings from Project Viva.** *Environment international*  
Lin, P. D., Cardenas, A., Rokoff, L. B., Rifas-Shiman, S. L., Zhang, M., Botelho, J., Calafat, A. M., Gold, D. R., Zota, A. R., James-Todd, T., Hauser, R., Webster, T. F., Oken, et al  
2024; 194: 109177
- **Prenatal metal exposures and kidney function in adolescence in Project Viva.** *Environmental health : a global access science source*  
Price, N. F., Lin, P. D., Cardenas, A., Rifas-Shiman, S. L., Zota, A. R., Hivert, M. F., Oken, E., Aris, I. M., Sanders, A. P.  
2024; 23 (1): 94
- **Cohort Profile Update: Project Viva Offspring.** *International journal of epidemiology*  
Rifas-Shiman, S. L., Aris, I. M., Switkowski, K. M., Young, J., Fleisch, A. F., Perng, W., Chavarro, J. E., Cardenas, A., Gold, D. R., Zhang, M., James, P., Whooten, R. C., Kleinman, et al  
2024; 53 (6)
- **Bronchial cell epigenetic aging in a human experimental study of short-term diesel and ozone exposures.** *Environmental epigenetics*  
Nwanaji-Enwerem, J. C., Bozack, A. K., Ward-Caviness, C., Diaz-Sanchez, D., Devlin, R. B., Bind, M. C., Cardenas, A.  
2024; 10 (1): dvae017
- **Corrigendum to Non-essential and essential trace element mixtures and kidney function in early pregnancy - A cross-sectional analysis in project viva [Environ. Res. 216P4 (2023) 114846].** *Environmental research*  
Lin, P. D., Cardenas, A., Rifas-Shiman, S. L., Zota, A. R., Hivert, M. F., Aris, I. M., Sanders, A. P.  
2024; 262 (Pt 1): 120004
- **Prenatal Phenol and Phthalate Exposure is Associated with Persistent Changes in DNA Methylation in Childhood**  
Khodasevich, D., Harley, K. G., Eskenazi, B., Barcellos, L. F., Cardenas, A., Holland, N.  
WILEY.2024: 45
- **Epigenetic Biomarkers for Understanding Adverse Experiences and Health.** *JAMA network open*  
Bozack, A. K., Merrill, S. M., Cardenas, A.

2024; 7 (8): e2427070

- **First trimester prenatal metal mixtures, vitamins, and hypertensive disorders of pregnancy in the project viva cohort.** *Environment international*  
Hernandez-Castro, I., Rifas-Shiman, S. L., Lin, P. D., Chavarro, J. E., Gold, D. R., Zhang, M., Mueller, N. T., James-Todd, T., Coull, B., Hivert, M. F., Oken, E., Cardenas, A.  
2024; 190: 108909
- **Carcinogenicity of talc and acrylonitrile.** *The Lancet. Oncology*  
Stayner, L. T., Carreón-Valencia, T., Demers, P. A., Fritz, J. M., Sim, M. R., Stewart, P., Tsuda, H., Cardenas, A., Consonni, D., Davies, L., De Matteis, S., Felley-Bosco, E., Ghio, et al  
2024
- **Prenatal blood metals, per- and polyfluoroalkyl substances and antigen- or mitogen-stimulated cord blood lymphocyte proliferation and cytokine secretion.** *Environmental research*  
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