

Irva Hertz-Picciotto, M.P.H., Ph.D.

Research/Academic Interests

Dr. Hertz-Picciotto has led a pioneering program of research on the environmental factors that influence the risk or severity of autism and other neurodevelopmental disorders and has published widely on prenatal exposures to air pollutants, pesticides, maternal metabolic conditions, infections, nutrition, endocrine disrupting chemicals and more. Dr. Hertz-Picciotto is the Director of the NIH-funded UC Davis Environmental Health Sciences Core Center encompassing faculty from six colleges and schools, with the mission to foster research advancing our understanding of: environmental causes of disease or disability, the mechanisms through which they operate, and the translation of this knowledge into policies and practices that can reduce exposures or mitigate their impacts on human health. Currently, Dr. Hertz-Picciotto is leading the Task Force to establish the UC Davis Institute on Climate Change and Health.

Title

Professor, Department of Public Health Sciences
Chief, Division of Environmental and Occupational Health
Director, Environmental Health Sciences Center

Specialty

Environmental and Occupational Health, Epidemiologic Methods

Department

Public Health Sciences

Division

Epidemiology
Environmental and Occupational Health

Center/Program Affiliation

UC Davis MIND Institute
UC Davis Comprehensive Cancer Center

Address/Phone

UC Davis School of Medicine, UC Davis School of Medicine - Medical Sciences 1C, Davis, CA 95616

Education

M.P.H., Epidemiology, UC Berkeley School of Public Health, Berkeley CA 1984
M.A., Biostatistics, UC Berkeley School of Public Health, Berkeley CA 1985
Ph.D., Epidemiology, UC Berkeley School of Public Health, Berkeley CA1989
B.A., Mathematics, UC Berkeley, Berkeley CA 1970

Professional Memberships

International Society of Environmental Epidemiology
Society for Epidemiologic Research

Honors and Awards

Distinguished Lecture: United States National Institute of Environmental Health Sciences. "Genes, Environment, Autism and Precision Public Health: At the Nexus of Multi-factor Etiology and Environmental Justice", 2019
Keynote Address: Environment and Autism: Understanding Causes from an Epidemiologic Perspective. Selected by the International Meeting for Autism Research, 2016

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John Goldsmith Lifetime Achievement Award for Sustained and Outstanding Contributions to Environmental Epidemiology. Issued by the International Society of Environmental Epidemiology, 2011

Lifetime Appointment as National Associate of the National Academies. Bestowed by the National Academy of Sciences and National Research Council (2002-present), 2002

McGavran Award for Excellence in Teaching, Awarded by UNC Chapel Hill, 2001

Select Recent Publications

Hertz-Picciotto I, Korrick SA, Ladd-Acosta C, Karagas MR, Lyall K, Schmidt RJ, Dunlop AL, Croen LA, Dabelea D, Daniels JL, Duarte CS, Fallin MD, Karr CJ, Lester B, Leve LD, Li Y, McGrath M, Ning X, Oken E, Sagiv SK, Sathyanaraya S, Tylavsky F, Volk HE, Wakschlag LS, Zhang M, O'Shea TM, Musci RJ; program collaborators for Environmental influences on Child Health Outcomes (ECHO). Maternal tobacco smoking and offspring autism spectrum disorder or traits in ECHO cohorts. Autism Res. 2022 Mar;15(3):551-569. doi:10.1002/aur.2665. Epub 2022 Feb 24. PMID: 35199959.

Hamra GB, Lesko CR, Buckley JP, Jensen ET, Tancredi D, Lau B, Hertz-Picciotto I; program collaborators for Environmental influences on Child Health Outcomes. Combining Effect Estimates Across Cohorts and Sufficient Adjustment Sets for Collaborative Research: A Simulation Study. Epidemiology. 2021 May 1;32(3):421-424. doi:10.1097/EDE.0000000000001336. PMID: 33591054.

Pham S, Yeap D, Escalera G, Basu R, Wu X, Kenyon NJ, Hertz-Picciotto I, Ko MJ, Davis CE. Wearable Sensor System to Monitor Physical Activity and the Physiological Effects of Heat Exposure. Sensors (Basel). 2020 Feb 6;20(3):855. doi:10.3390/s20030855. PMID:32041097.

Hertz-Picciotto I, Sass JB, Engel S, Bennett DH, Bradman A, Eskenazi B, Lanphear B, Whyatt R. Organophosphate exposures during pregnancy and child neurodevelopment: Recommendations for essential policy reforms. PLoS Med. 2018 Oct 24;15(10):e1002671. doi:10.1371/journal.pmed.1002671. PMID:30356230.

Hertz-Picciotto I, Schmidt RJ, Krakowiak P. Understanding environmental contributions to autism: Causal concepts and the state of science. Autism Res. 2018 Apr;11(4):554-586. doi:10.1002/aur.

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1938. Epub 2018 Mar 23. PMID:29573218.

Kim D, Volk H, Girirajan S, Pendergrass S, Hall MA, Verma SS, Schmidt RJ, Hansen RL, Ghosh D, Ludena-Rodriguez Y, Kim K, Ritchie MD, Hertz-Picciotto I, Selleck SB. The joint effect of air pollution exposure and copy number variation on risk for autism. Autism Res. 2017 Sep;10(9): 1470-1480. doi:10.1002/aur.1799. Epub 2017 Apr 27. PMID:28448694.

Shelton JF, Gerarty EM, Tancredi DJ, Delwiche L, Schmidt RJ, Ritz B, Hansen RL, Hertz-Picciotto I. Prenatal residential proximity to agricultural pesticides and neurodevelopmental disorders in the CHARGE study. Environ Health Perspect. 2014 Oct;122(10):1103-9. doi:10.1289/ehp.1307044. PMID:24954055.

Lyall K, Schmidt RJ, Hertz-Picciotto I. Maternal lifestyle and environmental risk factors for autism spectrum disorders. Int J Epidemiol. 2014;43(2):443-464. doi:10.1093/ije/dyt282. PMID: 24518932.

Hertz-Picciotto I, Delwiche L. The rise in autism and the role of age at diagnosis. Epidemiology. 2009 Jan;20(1):84-90. doi:10.1097/EDE.0b013e3181902d15. PMID:19234401.

Krakowiak P, Walker CK, Bremer AA, Baker AS, Ozonoff S, Hansen RL, Hertz-Picciotto I. Maternal metabolic conditions and risk for autism and other neurodevelopmental disorders. Pediatrics. 2012 May;129(5):e1121-8. doi:10.1542/peds.2011-2583. Epub 2012 Apr 9. PMID:22492772.

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