

NAME Howard W. Mielke	POSITION TITLE Professor, Department of Pharmacology
eRA COMMONS USER NAME (credential, e.g., agency login) Tulane University School of Medicine	

A. Professional Preparation

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Macalester College, St. Paul, Minnesota	BA	1963	Biology; Chem., Geog.
University of Michigan, Rackham, Ann Arbor, Mich.	MS	1967	Biology
University of Michigan, Rackham, Ann Arbor, Mich.	Ph.D.	1972	Geography (Environ. Sci.)

B. Appointments.

List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

- 1970-1973 Adjunct Assistant Professor, Man and the Earth's Ecosystem Program, Univ. of California, Los Angeles
 1973-1979 Assistant Professor, Department of Geography, University of Maryland, Baltimore County
 1979-1986 Assistant Professor, Department of Geography, Macalester College, St. Paul, Minnesota
 1986-1988 Research Associate, Center for Urban & Regional Affairs, Hubert H Humphrey Institute, Univ. of Minnesota
 1988-2006 Associate and Full Professor, College of Pharmacy, Xavier University of Louisiana, New Orleans, LA
 2006-present Research Professor, Department of Chemistry, Tulane University, New Orleans, LA
 2006-2011 Research Professor, Center for Bioenvironmental Research at Tulane & Xavier Universities, New Orleans
 2010-2011 Fellow with the Oak Ridge Institute for Science and Education for the scientific committee working to revise the EPA Air Quality Criteria Document for Lead
 2010-2011 Member of the U.S. Environmental Protection Agency, Science Advisory Board, Lead Dust Panel
 2012-present, Professor, Department of Pharmacology, Tulane University School of Medicine, New Orleans, LA

C. Selected Publications

- 1983 Lead Concentrations in Inner-City Soils as a Factor in the Child Lead Problem. Mielke, H.W., J.C. Anderson, K.J. Berry, P.W. Mielke, Jr., R.L. Chaney and M. Leech, Am J Pub Health 73 (12): 1366-1369.
- 1993 Lead Dust Contaminated USA Communities: Comparison of Louisiana and Minnesota. Mielke, H.W. Applied Geochem 8, Suppl. 2: 257-261.
- 1997 Associations between Lead Dust Contaminated Soil and Childhood Blood Lead: A Case Study of Urban New Orleans and Rural Lafourche Parish, Louisiana, USA. Mielke, H.W., D. Dugas, P.W. Mielke, K.S. Smith, S.L. Smith, C.R. Gonzales. Environ Health Perspect 105 (9): 950-954.
- 1997 Lead-Based Hair Coloring Products: Too Hazardous for Household Use, H.W. Mielke, M. D. Taylor, C. R. Gonzales M. K. Smith, P.V. Daniels, A.V. Buckner. J Am Pharm Assoc NS37(1):85-89.
- 1998 Soil is an Important Source of Childhood Lead Exposure. Mielke, H.W., P.L. Reagan. Environ Health Perspect (106) Supplement 1: 217-229.
- 1999 Lead in the Inner-Cities. Mielke, H.W. Am Scientist 87:62-73.
- 2000 Quantities and Associations of Lead, Zinc, Cadmium, Manganese, Chromium, Nickel, Vanadium, and Copper in Fresh Mississippi Alluvium and New Orleans Alluvial Soils. Mielke, H.W., C.R. Gonzales, M.K. Smith, P.W. Mielke. Sci Total Environ 246 (2-3): 249-259.
- 2001 Multiple Metal Contamination from House Paints: Consequences of Power Sanding and Paint Scraping in New Orleans. Mielke, H.W., E Powell, A. Shah, C. Gonzales, P.W. Mielke. Environ Health Perspect 109:973-978.
- 2002 Natural and Anthropogenic Processes that Concentrate Mn in Rural and Urban Environments of the Lower Mississippi River Delta. Mielke, H.W., C.R. Gonzales, E.T. Powell, A. Shah, P.W. Mielke. Environ Res 90 (2):157-168.
- 2002 Research Ethics in Pediatric Environmental Health: Lessons from Lead. Mielke, H.W. Neurotox Teratol 24(4):467-469.
- 2004 PAHs and Metals in Soils of Inner City and Suburban New Orleans, Louisiana USA. Mielke, H.W., G. Wang, C.R. Gonzales, E.T. Powell, B. Le, V. N. Quach. Environ Toxicol Pharm 18(3):243-247.
- 2005 Seasonality and Children's Blood Lead Levels: Developing a Predictive Model using Climatic Variables and Blood Lead Data from Indianapolis, Indiana, Syracuse, New York and New Orleans, Louisiana (USA). Laidlaw, M.A.S., H.W. Mielke, G.M. Filippelli, D. L. Johnson, C.R. Gonzales. Environ Health Perspect 113 (6):793-800.
- 2006 Hurricane Katrina's Impact on New Orleans Soils Treated with Low Lead Mississippi River Alluvium. Mielke, H.W., E.T. Powell, C.R. Gonzales, P.W. Mielke. Environ Sci Technol 40 (24): 7623-7628.

Program Director/Principal Investigator (Last, First, Middle): PI Name Mielke, Howard, Walter

- 2006 New Orleans Soil Lead (Pb) Cleanup Using Mississippi River Alluvium: Need, Feasibility and Cost. Mielke, H.W., E.T. Powell, C.R. Gonzales, P.W. Mielke, Jr., R.T. Ottesen, M. Langedal. *Environ Sci Technol* 40(08):2784-2789.
- 2007 Nonlinear Association between Soil Lead and Blood Lead of Children in Metropolitan New Orleans, Louisiana: 2000-2005. Mielke, H.W., C. R. Gonzales, E. Powell, M. Jartun, P.W. Mielke, Jr. *Sci Tot Environ* 388, 43–53.
- 2008 Mercury (Hg) and Lead (Pb) in Interior and Exterior New Orleans House Paint Films. Mielke, H.W., C. Gonzales. *Chemosphere* 72:882–885.
- 2008 Urban soil lead (Pb) footprint: Comparison of public and private housing of New Orleans. Mielke, H.W., C. Gonzales, E. Powell, P.W. Mielke. *Environ Geochem Health* 30 (3): 231-242.
- 2009 Children's Blood Lead and Standardized Test Performance Response as Indicators of Neurotoxicity in Metropolitan New Orleans Elementary Schools. Zahran, S., Mielke, H.W., S. Weiler, K.J. Berry, C. Gonzales. *NeuroTox* 30:888-897.
- 2010 New Orleans Before and After Hurricanes Katrina/Rita: A Quasi-Experiment of the Association between Soil Lead and Children's Blood Lead. Zahran, S., Mielke, H.W., C.R. Gonzales, E.T. Powell, S. Weiler. *Environ Sci Technol*
- 2010 Lead (Pb) Legacy from Vehicle Traffic in Eight California Urbanized Areas: Continuing Influence of Lead Dust on Children's Health. Mielke, H.W., M.A.S. Laidlaw, C. Gonzales. *Sci Tot Environ* 408:3965–3975.
- 2011 Characterization of Lead (Pb) from Traffic in 90 U.S.A. Urbanized Areas: Review of Urban Lead Dust and Health. Mielke, H.W., M.A.S. Laidlaw, C. Gonzales. *Environ Int* 37:248-257.
- 2011 Nonlinear Associations between Blood Lead in Children, Age of Child, and Quantity of Soil Lead in Metropolitan New Orleans. Zahran, S., H. W. Mielke, S. Weiler, C. R. Gonzales. *Sci Tot Environ* 409(7):1211-1218.
- 2011 Soil Intervention as a Strategy for Primary Lead Exposure Prevention: The New Orleans Lead-Safe Child Care Playground Project. Mielke, H.W., Covington, T. P. Mielke P. W., Wolman F. J., Powell E. T., Gonzales C. R. *Environ Poll* 159:2071-77.
- 2012 The Urban Rise and Fall of Air Lead (Pb) and the Latent Surge and Retreat of Societal Violence. Mielke, H.W., Zahran, S. *Environ Int* 43:48-55.
- 2012 Associations between Standardized School Performance Tests and Pb, Zn, Cd, Ni, Mn, Cu, Cr, Co, and V in New Orleans Soils. Zahran S, Mielke, H.W., Weiler, S., Hempel, L., Gonzales, C.R., Berry, K.J. , *Environ Poll* 169:128-135.
- 2013 Environmental and health disparities in residential communities of New Orleans: the need for soil lead intervention to advance primary prevention. Mielke Howard W., Christopher R. Gonzales, Eric Powell, Paul W. Mielke. *Environment International* 51:73-81. doi:10.1016/j.envint.2012.10.013
- 2013 Zahran Sammy, Mielke Howard W, Shawn P. McElmurry, Gabriel M. Filippelli, Mark A.S. Laidlaw, Mark P. Taylor. Determining the relative importance of soil sample locations to predict risk of child lead exposure. *Environ Int* 60:7–14

D. Synergistic Activities Scholarly and professional activities showing broader impact on creation, integration, and transfer of *knowledge*

1. *Pioneering research on distribution disparities of lead and other metals in Baltimore and indication that the same causal process affects all urban environments:* *Am J Pub Health* 1983; 73 (12):1366-1369.
2. *The effect of city size on the quantity of lead in urban environments confirming the hypothesis that fuel additives were a major cause of urban soil contamination:* *J Minnesota Acad Sci* 1984/85; 50 (1):19-24.
3. *Testimony before the U.S. Senate Hearing to ban lead additives in gasoline to safeguard environments of U.S. cities.*
4. *Recognition of the ecological influence of environmental lead on children's exposure as measured by blood lead:* *Environ Health Perspect* 1997; 105 (9):950-954.
5. *Development of a tool to measure surface metal loading on the soil surface:* *Environ Res* 2007; 103:154–159.
6. *Realization that environmental lead in attendance district schools is inversely associated with the school achievement scores of 4th grade students living in the same school district:* *Environ Res* 2005; 97(1):67-75.
7. *Assisted Norway with their National Clean Soil Program:* *Environ Geochem Health* 2008;30:623–637.
8. *Provided information about lead containing cosmetics that spurred the Canadian Parliament to establish labeling on health care products:* *J Am Pharm Assoc* 1997; NS37(1):85-89
9. *Demonstration of the feasibility and cost effectiveness of intervention on contaminated urban areas with low lead soil transported from outside of cities.* *Environ Sci Technol* 40(08):2784-2789.

E. Collaborators

Mielke, Paul W. Department of Statistics, Colorado State University

Berry, Kenneth, Ph.D., Department of Sociology, Colorado State University

Laidlaw, Mark A.S., Department of Environment and Geography, Macquarie University, Sydney, Australia

Weiler, Stephan, Ph.D. Department of Economics, Colorado State University, Fort Collins

Wolman, Fredericka, M.D., Director of Pediatrics, Health Department, State of Connecticut

Zahran, Sammy, Ph.D., Department of Economics, Colorado State University, Fort Collins