THOMAS J. LUBEN

U. S. Environmental Protection Agency, National Center for Environmental Assessments 109 T.W. Alexander Drive, Research Triangle Park, NC 27711 919-541-5762 (office), 919-541-2985 (fax), Email: luben.tom@epa.gov

EDUCATION

Colorado State University

Fort Collins, CO

Ph.D. in Environmental Health awarded 01/06

Tulane University

New Orleans, LA

MSPH in Environmental Health awarded 12/00

Allegheny College

Meadville, PA

B.S. in Biology, Minor in Psychology awarded 6/96

WORK EXPERIENCE

U.S. Environmental Protection Agency, NCEA

Research Triangle Park, NC

10/2010 to present, Senior Epidemiologist

05/07 to 10/2010, Epidemiologist

Team leader for Epidemiology/Statistics Team; Prepared Integrated Science Assessments of available epidemiologic literature to delineate the scientific bases for development of National Ambient Air Quality Standards; Communicate and defend the scientific bases for Agency standards via representation of the Agency in interactions with EPA Science Advisory Board (SAB) Committees; Prepared Congressional testimony; Identified significant gaps in knowledge (research needs) related to the scientific bases for Agency standards and regulatory activities; Conducted research targeted to improve risk assessment methods or reduce key uncertainties in assessed data bases.

University of North Carolina, Department of Epidemiology

Chapel Hill, NC

09/2010 to present, Adjunct Assistant Professor

National Birth Defects Prevention Study

North Carolina Center for Birth Defects Research

01/06 to present, *Investigator*

Prepared proposals and conducted studies of birth defects and adverse birth outcomes as part of largest national case-control study of birth defects; Served as chair of the Environmental Working Group (02/09 to present), coordinating environmental epidemiology researchers from 10 centers

University of North Carolina, Department of Epidemiology

Chapel Hill, NC

01/06-04/07, NIEHS Post-Doctoral Fellow

Research projects included cohort study of disinfection by-products and semen quality and assessment of prenatal health risks associated with disinfection by-products during gestation.

Colorado State University, Department of Environmental Health

Fort Collins, CO

08/02-08/05, Research Assistant

Evaluated the feasibility of matching geocoded residential addresses with a specific water utility service area as part of exposure assessment in a large case-control study of birth defects.

Yale University, School of Forestry and Environmental Studies

New Haven, CT

03/01-08/02. Research Associate

Monitored and evaluated migration of anadromous fish over recently installed fish ladder in the West River; Analyzed NPDES permits of facilities discharging waste into Quinnipiac River; Established and facilitated lecture series, prepared grant proposals, administered grants.

Central America

06/96-06/99, Natural Resources Promoter

Developed community infrastructure in area recently inhabited by civil war veterans as a result of agrarian reform law in El Salvador; Educated local farmers in soil conservation, crop rotation, integrated pest management and agro-forestry systems in Honduras; Educated over 30 extentionists in the management of agricultural projects in rural Nicaragua.

SELECTED PEER-REVIEWED JOURNAL ARTICLES

- Sacks JD, Rappold AG, Davis Jr. JA, Richardson DB, Waller AE, Luben TJ. 2014. Influence
 of urbanicity and county characteristics on the association between ozone and asthma
 emergency department visits in North Carolina. Environmental Health Perspectives, DOI:
 10.1289/ehp.1306940
- 2. Nichols JL, Owens EO, Dutton SJ, **Luben TJ**. 2013. Systematic review of the effects of black carbon on cardiovascular disease among individuals with pre-existing disease. International Journal of Public Health, 58(5): 707-24. DOI: 10.1007/s00038-013-0492-z.
- 3. Vinikoor-Imler LC, Davis JA, Meyer RE, **Luben TJ**. 2013. Early prenatal exposure to air pollution and its associations with birth defects in a state-wide birth cohort from North Carolina. Birth Defects Research Part A: Clinical and Molecular Teratology, <u>97(10)</u>: 696-701. DOI: 10.1002/bdra.23159.
- 4. Desrosiers TA, Herring AH, Shapira SK, Hooiveld M, **Luben TJ**, Herdt-Losavio ML, Lin S, Olshan AF, and the National Birth Defects Prevention Study. 2012. Paternal occupation and birth defects: findings from the National Birth Defects Prevention Study. Occupational and Environmental Medicine, 69: 534-542.
- 5. Kirrane E, Svendsgaard D, Ross M, Buckley B, Davis A, Kotchmar D, Johns D, Long T, **Luben TJ**, Smith G, Wichers-Stanek L. 2011. A multipollutant analysis: comparison of risk estimates for the effect of PM, NO2, and CO on cardiovascular hospital admissions within and across single-city studies. Atmosphere; 2(4):688-701.
- 6. Jablonski Horton, B, **Luben TJ**, Herring AH, Savitz DA, Singer PC, Weinberg HS, Hartmann KE. 2011. The effect of water disinfection by-products on pregnancy outcomes in two southeastern US communities. Journal of Occupational and Environmental Medicine, 53(10): 1161-1171.
- 7. Vinikoor-Imler L, Davis JA, **Luben TJ**. 2011. An ecologic analysis of county-level PM2.5 concentrations and lung cancer incidence and mortality. International Journal of Environmental Research and Public Health. 8(6): 1865-1871.
- 8. Sacks JD, Wichers Stanek L, **Luben TJ**, Johns DO, Buckley BJ, Brown JS, Ross M. 2011. Particulate Matter Induced Health Effects: Who's Susceptible? Environmental Health Perspectives, 119(4): 446-454.
- 9. Olshan AF, **Luben TJ**, DeMarini DD, Perreault SD, Chan RL, Herring AH, Basta PV, Hanley N. 2010. Preliminary examination of polymorphisms of GSTM1, GSTT1, and GSTZ1 in relation to semen quality. Mutation Research: Fundam. Mol. Mech. Mutagen. 688 (1-2): 41-46.
- 10. Hansen C, **Luben TJ**, Sacks JD, Olshan AF, Jeffay S, Strader L, Perreault SD. 2010. The effect of ambient air pollution on sperm quality. Environmental Health Perspectives, 118 (2): 203-209.
- 11. Messer LC, **Luben TJ**, Mendola P, Carozza SE, Horel SA, Langlois PH. 2010. Urban-rural residence and occurrence of cleft defects in Texas, 1999-2003. Annals of Epidemiology, 20(1): 32-39.
- 12. **Luben, TJ**, Messer LC, Mendola P, Carozza SE, Horel SA, Langlois PH. 2009. Urban-rural residence and occurrence of neural tube defects in Texas, 1999-2003. Health and Place, 15: 848-854.
- Richter W, Hart, Jr. TF, Luben TJ, Freud S, Nuckols JR. 2009. Evaluation of Two Methods of Interpolating Quarterly Trihalomethane Levels between Sampling Dates, Journal of Exposure Science and Environmental Epidemiology, 19: 405-413.

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- 14. **Luben TJ**, Nuckols JR, Mosley BS, Hobbs C, Reif JS. 2008. Maternal Exposure to Water Disinfection By-Products during Gestation and Risk of Hypospadias, Occup Environ Med, 65(6): 420-427.
- 15. **Luben TJ**, Olshan AF, Herring AH, Jeffay S, Strader L, Buus RM, Chan RL, Savitz DA, Singer PC, Weinberg HS, Perreault SD. 2007. The Healthy Men Study: An Evaluation of Exposure to Disinfection By-Products in Tap Water and Sperm Quality. Environmental Health Perspectives, 115(8): 1169-1176.
- 16. Meyer KJ, Reif JS, Veeramachaneni DNR, **Luben TJ**, Mosley BS, Nuckols JR. 2006. Agricultural Pesticide Use and Hypospadias in Eastern Arkansas. Environmental Health Perspectives, 114(10): 1589-1595.

REPORTS

- U.S. EPA. Provisional Assessment of Recent Studies on Health Effects of Particulate Matter Exposure. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-12/056F, 2012.
- U.S. EPA. Integrated Science Assessment (ISA) for Ozone (Final). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-10/076A.
- U.S. EPA. Integrated Science Assessment (ISA) for Carbon Monoxide (Final). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-09/019F.
- U.S. EPA. Integrated Science Assessment (ISA) for Particulate Matter (Final). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-08/139F.
- U.S. EPA. Provisional Assessment of Recent Studies on Health and Ecological Effects of Ozone Exposure. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-09/101, 2009.
- U.S. EPA. Integrated Science Assessment (ISA) for Sulfur Oxides Health Criteria (Final). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-08/047F.
- U.S. EPA. Integrated Science Assessment for Oxides of Nitrogen Health Criteria (Final). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-08/071.
- Nuckols JR, Langlois P, Lynberg ML, **Luben T**. Linking Geographic Water Utility Data with Study Participant Residences from the National Birth Defects Prevention Study. Amer. Water Works Assn. Denver, CO. 80 p. 2004. (Web Publication: http://www.waterrf.org/ProjectsReports/PublicReportLibrary/2832.pdf).

INVITED SEMINARS

- Luben TJ and Nichols JL. Health Effects of Black Carbon. Mid-Atlantic Diesel Collaborative webinar. September 2013.
- Luben TJ. Update on EPA's Multipollutant Science Assessment: Scope, Development, and Next Steps. EPA's Clean Air Research Center (CLARC) Annual Meeting, Boston, MA. June 2012.
- Luben TJ. Black Carbon: Digging Deeper Black Carbon Effects on Public Health. Office of Air Quality, Planning and Standards Lunch and Learn Seminar. RTP, NC. June 2012.
- Luben TJ. Black Carbon Effects on Public Health. NCER Star Grant Black Carbon Kick-off Meeting. Research Triangle Park, NC. May 2012.
- Luben TJ. Health Effects Assessments: US EPA Update. 15th Meeting of the Joint Convention/WHO Task Force on Health Aspects of Long-range Transboundary Air Pollution. Bonn, Germany. May 2012.
- Luben TJ. Perspectives: Developing Scientific Assessments Supporting Policy Decisions. Community Modeling and Analysis Annual Meeting. Chapel Hill, NC. October 2010.
- Luben TJ. Long-term Exposure to PM2.5 and Risk of Mortality. Air Toxics Risk Assessment National Conference. Atlanta, GA. February 2010.
- Luben TJ. Review of Integrated Science Assessment for Oxides of Nitrogen. Air Quality Research Subcommittee, Committee on Environment and Natural Resources. Washington, DC. January 2010.
- Luben TJ. The Use of Epidemiological Studies in the NAAQS Regulatory Process. Division of Environmental Health Seminar, Yale University's School of Public Health. New Haven, CT. April 2008.

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AWARDS AND RECOGNITION

- U.S. EPA National Honor Award Bronze Medal. Ozone NAAQS Reconsideration Rule. December 2011.
- U.S. EPA National Honor Award Bronze Medal. Health and Environmental Research Online (HERO) Team. August 2011.
- U.S. EPA National Honor Award Bronze Medal. Integrated Science Assessment Team for exceptional scientific leadership, and use of emerging technology and innovation. July 2010.
- U.S. EPA National Honor Award Gold Medal. NOx/SOx Integrated Science Assessment Team. June 2009.
- Merit-Based Student Travel Award for abstract: Health Men Study. Poster Presentation. American Society of Andrology (ASA). Tampa, FL (2007).
- Merit-Based Student Travel Award for abstract: Maternal Exposure to Water DBPs and Risk of Hypospadias. Oral Presentation. American Congress of Epidemiology. Seattle, WA (2006).
- 2003-2004 Outstanding Graduate Student; Department of Environmental and Radiological Health Sciences, Colorado State University.
- Outstanding Student Poster Presentation; 2004 Colloquium on Environmental Research, Colorado State University.

POST-DOCTORAL FELLOWS SUPERVISED

Craig Hansen, PhD; January 2008-February 2009; Assistant Investigator, Kaiser Permanente Center for Health Research.

Kristen Rappazzo, PhD; September 2013 – Present.

DOCTORAL STUDENT COMMITTEES

Jeanette Stingone, "Maternal exposure to criteria air pollutants during early pregnancy and congenital heart defects in offspring." Department of Epidemiology, University of North Carolina at Chapel Hill. 4/2013.

Jennifer Winston, "Prenatal exposure to atrazine via drinking water and the risk of hypospadias: a geographic analysis." Department of Medical Geography, University of North Carolina at Chapel Hill. 6/2014 (expected).

JOURNAL ACTIVITIES

REVIEWER

American Journal of Epidemiology

American Journal of Medical Genetics: Part A

Chemosphere

Environmental Health Perspectives

Environmental Health

Environmental Research

Environmental Science and Technology

Epidemiology

Human Reproduction

International Journal of Environmental Research and Public Health

International Journal of Hygiene and Environmental Health

Journal of Andrology

Journal of Epidemiology and Community Health

Maternal and Child Health Journal

Occupational and Environmental Medicine

Public Health

Science of the Total Environment

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