

Biographical Summary

Thomas A. Lewandowski, Ph.D., DABT, Senior Toxicologist

Dr. Lewandowski is a toxicologist and chemist with over sixteen years of experience in toxicology and human health risk assessment. His specific areas of expertise include product safety evaluation, mercury toxicology, reproductive and developmental toxicology, and the critical evaluation of human and animal toxicology studies. Dr. Lewandowski has authored several publications relating to biologically based dose-response modeling and the toxicological effects of methylmercury. He is also a co-author of two book chapters describing methods for investigating reproductive and developmental toxicology. Before joining Gradient, he was an NIEHS trainee at the University of Washington, conducting research related to development of a pharmacokinetic-pharmacodynamic model for the neurodevelopmental effects of methylmercury. He was also involved in conducting a study of bone and blood lead levels in a community with elevated soil and dust lead exposures.

Representative Projects

Evaluation of Lead Releases from Consumer Products: Developed and applied adult blood lead model to predict blood lead levels from discontinuous exposures to lead released from a consumer product.

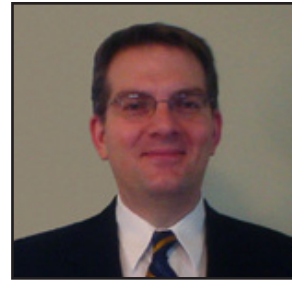
Historic Knowledge Regarding Toxicity of Several Industrial Chemicals: Evaluated historical uses, evolution of toxicological testing methodology and historical approaches for developing health criteria as these issues apply to TCE, vinyl chloride and asbestos.

Real Time Risk Assessment of Developmental and Reproductive Health Hazards: Assisting a major chemical manufacturer in evaluating Developmental and Reproductive Toxicology (DART) risks for employees who become pregnant. Via a streamlined risk assessment approach, potential DART risks for workers are assessed within 5 days of notification so that necessary workplace controls can be implemented.

Risk Evaluation of Fungicides in Children's Art Paint: Evaluated the potential health implications of a fungicidal contaminant in an art paint material. A rapid (24 hr) assessment was conducted and used by the client to decide on the need for a product recall.

Lead Bioavailability Study: Developed study protocols and served as study monitor for an investigation of the bioavailability of arsenic from dislodgeable residue associated with CCA-treated wood. The study was conducted in juvenile swine, which have a gastrointestinal physiology which is similar to that of juvenile humans.

Advice on New Product Design: Advised a leading industrial design firm, engaged in redesigning an architectural material, on the potential toxicological and environmental impacts of various alternative materials (i.e., wood, other vegetative fibers, various plastics).



Practice Areas & Expertise

- Risk Assessment
- Reproductive & Developmental Toxicology
- Pharmacokinetic Modeling
- Metals Toxicology
- Product Safety

Education

Ph.D., Environmental Health/Toxicology,
University of Washington

M.P.H., Environmental Chemistry,
University of Michigan

B.S., Biology, University of Michigan

Diplomate of the American Board of Toxicology

Selected Publications

Lewandowski, TA. 2006. "Questions regarding environmental mercury release, special education rates, and autism disorder: An ecological study of Texas" by Palmer et al. *Health Place*. 12:749-750

Lewandowski, TA; Hayes, AW; Beck, BD. 2005. "Risk Evaluation of Occupational Exposure to Methylene Dianiline and Toluene Diamine in Polyurethane Foam." *Human and Experimental Toxicol.* 24(12):655-62.

Lewandowski, TA; Rhomberg, LR. 2005. "A proposed methodology for selecting a trichloroethylene unit risk value for use in risk assessment." *Reg. Toxicol. and Pharm.* 41:39-54

Lewandowski, TA; Seeley, MR; Beck, BD. 2004. "Interspecies differences in susceptibility to perturbation of thyroid homeostasis: a case study with perchlorate." *Reg. Toxicol. and Pharm* 39(3): 348-362.

Lewandowski, TA; Ponce, RA; Charleston, JS; Hong, S; Faustman, EM. 2003. "Effect of methylmercury on midbrain cell proliferation during organogenesis: potential cross-species differences and implications for risk assessment." *Toxicol Sci.* 75(1):124-33.