

Types of Expertise

Human Health Risk Assessment



The Risk Science Center scientists combine a practitioner's knowledge of the issues and pitfalls involved in the development of human health risk assessments, together with cutting-edge toxicology expertise, to develop state-of-the-science assessments. Our research, aimed at improving risk assessment methods particularly in the areas of dose-response and mode of action, further enhance our analyses. In solving risk problems for a diverse array of government and private sponsors, we apply a collaborative philosophy that emphasizes partnership building, allowing us to expand our

pool of expertise, build on multiple perspectives, and ensure the use of the best science. These strengths form the basis for our development of independent and science-driven analyses for a range of risk assessment products such as screening-level assessments, dossiers for HPV and REACH, occupational assessments, and in-depth evaluations considering mechanistic data and using sophisticated modeling techniques.

For more information, contact Dr. Lynne Haber (lynne.haber@uc.edu; 513-558-7631).

Peer Review & Consultation

Engaging outside experts to review risk assessments and methods can help insure high quality and scientifically defensible work products and results. Government agencies, NGOs and industry recognize the value added by expert peer review and the Risk Science Center is a world leader in providing independent expert review for all types of risk assessment documents and activities. We provide a variety of opportunities and services to engage expert peers, including in-person panel meetings, webcasts and webinars; letter reviews; workshops to develop risk values or methods; and in-house technical reviews.



For more information contact Ms. Jacqueline Patterson (jacqueline.patterson@uc.edu; 513-558-7908).

Risk Assessment Training



The Risk Science Center is committed to working with the public to improve knowledge and understanding of risk assessment issues. Our education goal is to share our knowledge with others who are interested in learning risk assessment through developing our risk assessment training courses suitable to a variety of audiences including industry, government, the legal community, academia, nonprofits, and citizens' groups. We strive to make risk issues and the underlying science understandable to the intended audience and skill level.

For more information, contact Ms. Patricia Nance (patricia.nance@uc.edu; 513-558-1054)

Occupational Risk & Exposure

Although a number of U.S. organizations develop occupational exposure limits (OELs), much of the effort has focused on a relatively small subset of high volume chemicals, or those with particularly severe toxic endpoints. As a result, many workers are exposed to substances for which no guidance on acceptable exposure levels has been developed. The shortfall in protection of worker health due to the limited number of OELs suggests that active participation by the Risk Science Center in this area is consistent with our mission to use the best available science for development of risk values to protect public health. The Center's goal is to work cooperatively with other organizations' efforts to see that more OELs are developed and take full advantage of advances in risk assessment methods.



The Risk Science Center works to support OEL development through two distinct programs: development of sound OELs by Center staff, and organizing independent peer reviews of values developed by others.

For more information, contact Dr. Andy Maier (maierma@ucmail.uc.edu; 513-558-2407)



Department of
Environmental Health

Risk Science Center



Risk Methods Development



health risk assessment for potentially-susceptible populations and other areas of uncertainty in risk assessment.

The field of risk assessment is changing rapidly as the "omics" revolution and the burgeoning field of molecular toxicology provide a wealth of data that were not traditionally available. The Risk Science Center's research seeks to enhance the use of data on mode and mechanism of action to inform qualitative and quantitative aspects of risk assessment. We do this by designing targeted studies and decision frameworks to address key MOA questions, incorporating biomarker data to extend the dose-response curve using advanced PBPK and BBDR modeling approaches, and developing approaches to evaluate

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Pharmaceutical Support

The Risk Science Center is a world leader in deriving safe dose estimates for human health. At the Risk Science Center, pharmaceutical services build on our strength as a leader in toxicological risk assessment. Whether you need an Occupational Exposure Limit set for an active pharmaceutical ingredient, are concerned about the safety implications of an impurity in your raw material or finished product, or are not sure how a regulatory guidance applies to your particular situation, we have the expertise to meet your needs. Our highly qualified team includes occupational physicians, industrial hygienists, pharmacists, and board-certified toxicologists.



For more information, contact Dr. John Reichard (reichajf@ucmail.uc.edu; 513-558-7946)



Department of
Environmental Health

Risk Science Center



Site & Product Assessment



The Risk Science Center provides integrated toxicology support for product safety evaluation and characterization of environmental site-related risks through our extensive network of international experts in exposure modeling.

For more information, contact Dr. Andy Maier (maierma@ucmail.uc.edu; 513-558-2407)

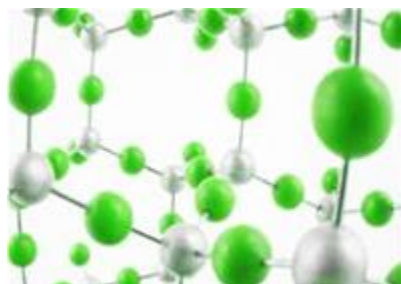
Ecotoxicology & Ecological Risk Assessment

The Risk Science Center has an expanded suite of ecological and environmental sciences services, complementing our strong historical reputation in health risk assessment and industrial hygiene. Our staff includes scientists with broad experience in ecotoxicology, environmental fate, and ecological risk and hazard assessment of chemical ingredients, products and by-products. We provide our private and public sector sponsors with fully integrated health and environmental services to support safe, responsible, and compliant chemical characterization, formulation, and management.



For more information on our Ecotoxicology or Ecological Risk Assessment Program, please contact Alison Pecquet (alison.pecquet@uc.edu; 513-558-6179).

Green Chemistry



At the Risk Science Center, we embrace the principles of Green Chemistry to help our sponsors design products and processes that reduce or eliminate the generation of hazardous substances. We offer systematic approaches to weighing comparative health and environmental risks, to help prevent waste, design safer products, and minimize the potential for accidents.

For more information, contact Dr. Lynne Haber (lynne.haber@uc.edu; 513-558-7631)