The accelerated, intensive hands-on training in
HAZARD CHARACTERIZATION and
DOSE-RESPONSE ASSESSMENT

RISK ASSESSMENT FROM 0 TO 95% CONFIDENCE IN 5 DAYS!

Toxicology Excellence for Risk Assessment (TERA)
1250 Ohio Pike, Suite 197
Cincinnati, Ohio 45102
Course Information

Who should attend?
• Risk assessors and toxicologists who conduct, write, and/or review chemical assessments.
• Risk managers or policymakers who use the results of chemical assessments and want to fully understand the processes involved in risk development.

Prerequisites
• Basic understanding of toxicology.
• Interest in developing skills in human health risk assessment.

What you should bring
• Laptop
• Calculator

What you will learn
• This is a 5-day intensive, hands-on training in hazard characterization and dose-response assessment.
• Both beginners and expert toxicological risk assessors will learn advanced methods and enhance their understanding and skills in the basics.
• Course lectures will be supplemented with daily hands-on application exercises.

There will be homework
Make sure to reserve time each evening for the homework exercises.

Class is held Monday through Friday from 8:30am to 5:00pm but usually ends early on Friday.

Upon completion of the course, participants will be able to derive and evaluate risk values and supporting documentation for both non-cancer and cancer risk assessments. They will also experience how peer review works and what’s is expected of each reviewer.
Course Topics

- Non-Cancer and Cancer Risk Assessment Methods.
- Critically analyze effect data.
- Apply frameworks for evaluating mode of action (MOA) & human relevance.
- Understand & apply toxicokinetic data in evaluating MOA & developing risk values.
- Synthesize data for hazard characterization and critical effect identification.
- Learn latest technologies in risk assessment.
- Conduct systematic review and critically analyze effect data.

Dosimetric Adjustment Methods in Dose-Response

- Develop interspecies oral dose adjustments, conversions for cancer unit risk/slope factor and inhalation exposures, and calculate human equivalent concentrations (HECs) for particles and vapors using US EPA's Multiple-Path Particle Dosimetry Model (MPPD).
- Understand uses of PBPK modeling in risk assessment and issues for its application.

Benchmark Dose (BMD) Modeling and Application in Risk Assessment

- Hands-on experience using BMD modeling for all models in EPA software (i.e., dichotomous continuous, cancer, nested.)
- Apply BMD modeling, choose models & parameters, select data & run models, and select appropriate BMD as point of departure in a human health assessment.
- Apply Bayesian BMD modeling in human health assessment

Principles for Application of Uncertainty Factors & Chemical Specific Adjustment Factors (CSAFs)

- Use of uncertainty factors by regulatory groups, use of data to support values other than defaults.
- New Approach Methodologies (NAMs) Use of NAMs (Computational models, Read-across (RAx), Quantitative Structure Activity Relationships (QSARs), etc., in risk assessment.
SOT and SRA Endorsement:

Each individual course must be reviewed for endorsement. Previous Dose-Response Assessment Boot Camp courses have been endorsed by SOT and SRA, and this one is currently being reviewed. We are awaiting decisions from both organizations.

Visit www.TERA.org for course information, registration form, cancellation policy and any updates.
For questions, or group discount rates contact Valerie Ayers at ayers@TERA.org

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For more information about this course or customized courses contact:

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the Course Experience

Location
The course is held at the Hampton / Homewood Suites Hotels, 617 Vine Street, Cincinnati, Ohio 45202 in the heart of the Queen City.

Lunch
Lunch is provided daily. Because this is an intense training, we serve meals that fuel both body and brain.

Specialty meals can be created for those who are vegetarian, vegan, gluten free, or have food allergies or restrictions.

Beverages and substantial snacks are also served during two daily breaks.

are served twice daily.
Not only did I learn how to perform risk assessment, hazard assessment, and dose-response analysis, but also I met and networked with many professionals from a variety of industries, including consumer products, biotechnology, environmental engineering, and even a government toxicologist from Chile. Most of the other students in the course were professionals with varying years of experience in risk assessment looking for continued education. I learned from their stories and the questions they had about the material. Further, it was a unique opportunity to learn about a variety of industry and government careers.

Overall, I benefited greatly from this opportunity, and I believe I took a good STEP into risk assessment that will be hugely valuable to my career development.

-Anne T.

My experience at TERA’s Dose-Response Boot Camp was outstanding. While the lectures and class exercises provided the fundamentals, the true capstone experience arose from our case study risk assessment. This consisted of a guided set of diverse and complicated scientific studies that our small group of four people had to wade through and utilize to perform a full risk assessment, based on real-world data, and identify a “safe” dose or lifetime risk factor.

My group had many spirited debates on how to approach the problem; we were assessing the carcinogenicity of a dietary chemical that appeared to cause thyroid and mammary tumors. More so than the science or analytics, this case study provided an opportunity to debate the appropriate risk assessment path among well-trained and clever scientists. This is where the “art” of risk assessment comes into play and ended up being a fun exercise.

-Michael K.
The location is energetic and exciting...steeped in history with lots of calm common spaces. You can take a brisk city walk, relax during lunch, or just enjoy some down time.

Credits Available

Continuing Maintenance (CM) points are available from the American Board of Industrial Hygienists (ABIH)

Continuing Education Units (CEU) are available from the National Environmental Health Association (NEHA)
The Hampton Inn and Homewood Suites share the same entrance and amenities.
Hotel options

There are three convenient hotels for the Hampton location.

Historic Downtown Hotel -
The Cincinnatian, Curio Collection (hilton.com)

Homewood Suites
Downtown Cincinnati, Ohio Hotel (hilton.com)

Hampton Inn & Suites
Downtown Cincinnati, OH Hotel (hilton.com)
Registration

Please Print Clearly
ALL FIELDS REQUIRED

Attendee Name: _____________________________________________

Affiliation: __________________________________________________

Address: ____________________________________________________

____________________________________________________________

Phone: ________  ________  ______________________

Email: ______________________________________________________

Registration Course Fee: for Fall 2024 (Lunches are included in price)

☐$2,750  General  ☐$2,250  State/Local/Tribal

Payment Method:

☐ Check (payable TERA, include Attendee Name in memo)
  ☐ Purchase Order (government agencies only email us for details)

☐ Credit Card:  ☐ Visa  ☐ MasterCard

Card# ______________________________________________________________________

Expiration date: ___________________________  Security No. ____________________

Name on card:  _______________________________________________________________

Signature: __________________________________________________________________

Billing Address: _______________________________________________________________

______________________________________________________  ☐ or same as above

Please review TERA’s cancellation and substitution policy at www.TERA.org
Then check:  ☐ I’ve read and understand TERA’s cancellation policy

Email to: ayers@tera.org (secure, encrypted email),  Fax to: 513-488-1990
or Mail to:  TERA

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