Summary

The Alliance for Risk Assessment (ARA) sponsors a series of workshops titled *Beyond Science & Decisions: From Problem Formulation to Comprehensive Risk Assessment*. Building on the ideas of the National Academy of Sciences' *Science & Decisions: Advancing Risk Assessment* (2009), ten workshops have been conducted that brought together over 60 organizations seeking to clarify and advance the NAS recommendations (see: [https://tera.org/Alliance%20for%20Risk/ARA_Dose-Response.htm](https://tera.org/Alliance%20for%20Risk/ARA_Dose-Response.htm)). A total of over 40 case studies were presented at these workshops, which provided a real-time compendium of practical, problem-driven approaches for “fit for purpose” risk assessments. Specifically, the compendium links novel and evolving scientific methods and approaches with specific problems faced by risk assessors and risk managers in a variety of organizations (e.g., local, regional and federal governments, academia, private sector).

Background & Purpose

Due to continued demand for the types of work products achieved by these workshops, the workshop series is continuing and will expand upon the discussion set forth by *Science and Decisions: Advancement of Risk Assessment* (NAS, 2009). These workshops will be conducted under the aegis of the Alliance for Risk Assessment (ARA), a broad-based coalition (see: [https://tera.org/Alliance%20for%20Risk/index.htm](https://tera.org/Alliance%20for%20Risk/index.htm)).

Workshop Objectives

- Improve the risk assessment process by developing an updated and ongoing compendium of practical, problem-driven approaches for “fit for purpose” risk assessments, linking methods with specific problem formulations (e.g., prioritization, screening, and in-depth assessment) for use by risk assessors and managers at a variety of levels (e.g., states, regional managers, people in a variety of agencies, and in the private sector).
- Implement a multi-stakeholder approach to share information, ideas, and techniques in support of developing practical problem-driven risk assessment methods.
• Identify effective and meaningful problem formulation, and useful hazard identification, dose-response, exposure assessment, and risk characterization techniques for specific issues, including consideration of relevant data, description of assumptions, strengths, and limitations, and how the techniques address key considerations in risk assessment and decision-making. These techniques should appropriately reflect the relevant biology (including the biology of thresholds), mode of action information, and exposure variability at a level of appropriate detail.

• Provide methods to explicitly address human variability in assessments, including explicit consideration of underlying disease processes and exposure conditions, as appropriate for the relevant risk assessment context.

• Identify methods for calculating the probability of response for noncancer endpoints, as appropriate for the relevant risk assessment context.

• Identify useful decision-making approaches that incorporate risk information and uncertainty analysis.

• Develop a risk methods compendium that will serve as a resource for regulators and scientists on key considerations for applying selected dose-response or exposure assessment techniques for various problem formulations, with suggested techniques and resources.

Agenda and Potential Speakers: Coming Soon

Sponsors and Relevant Committees

A number of organizations have sponsored this workshop series through in kind donations or grants. See: https://tera.org/Alliance%20for%20Risk/ARA_Dose-Response_Sponsors.htm. Three committees also shepherd this workshop series:

• The Alliance for Risk Assessment Steering Committee: https://tera.org/Alliance%20for%20Risk/ARA_Steering_Committee.htm

• The Beyond Science and Decisions Science Panel: https://tera.org/Alliance%20for%20Risk/Workshop/Panel.htm

• The Risk Assessment Advisory Committee, which includes state, federal, industry, and NGO representatives.

Listing of Case Studies

The recommended framework for the workshops and case studies is currently being restructured. For access to any of the prior case studies, please see https://tera.org/Alliance%20for%20Risk/Workshop/Framework/ProblemFormulation.htm, or contact Michael Dourson with Toxicology Excellence for Risk Assessment (TERA) at dourson@tera.org.

Registration Information

See: https://tera.org/Alliance%20for%20Risk/Workshop/WS10Registration.html

Venue Address and Hotel Information: Coming Soon