



EnviroTox Database: Overview and Applications

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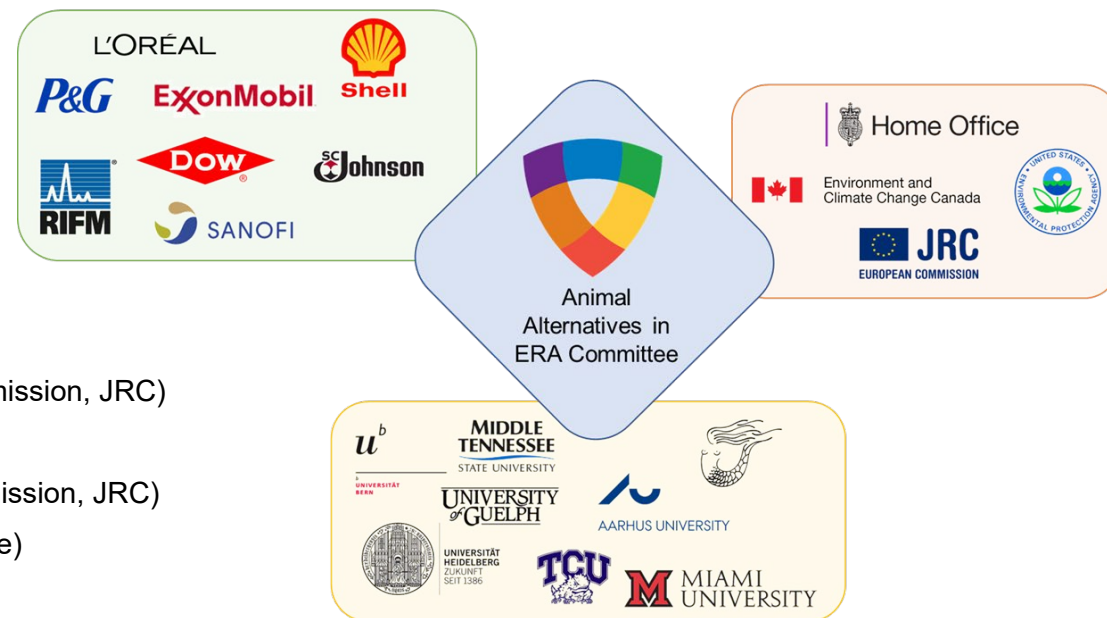
SETAC North America Annual Meeting
Toronto Canada

Acknowledgments

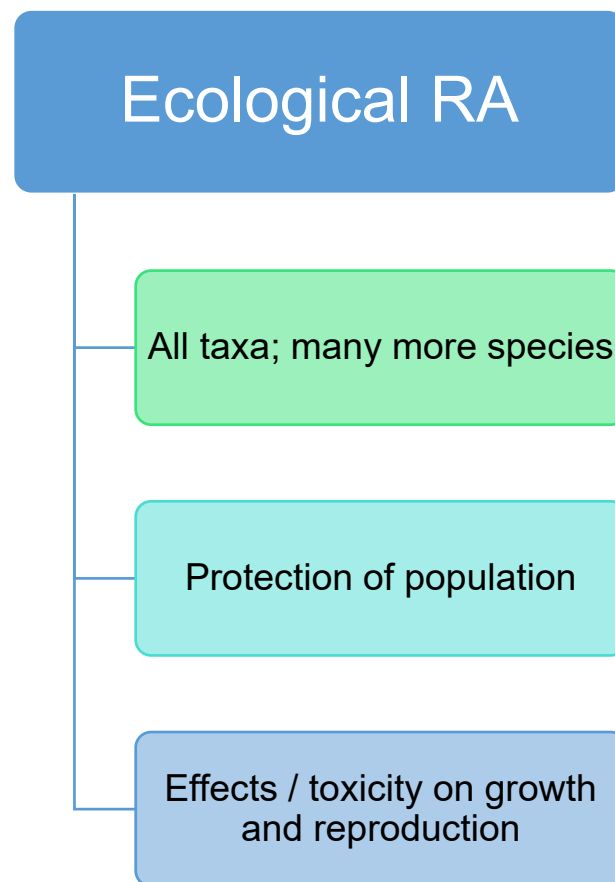
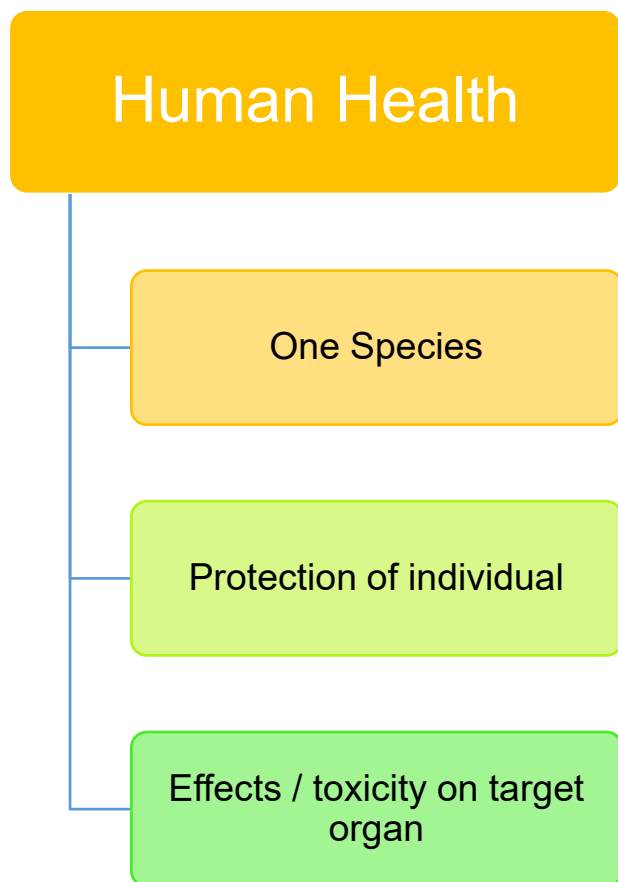
HESI EnviroTox Team

- Amy Beasley (Dow Chemical)
- Mace Barron (USEPA)
- Adriana Bejarano (Shell)
- Scott Belanger (Procter & Gamble)
- Mark Bonnell (ECCC)
- Jessica Brill (Procter & Gamble)
- Greg Carr (Procter & Gamble)
- Daniel Chang (USEPA)
- Kristin Connors (Procter & Gamble)
- Dick DeZwart (DdZ Ecotox)
- Kellie Fay (USEPA)
- Marlies Halder (European Commission, JRC)
- Sarah Hughes (Shell)
- Aude Kienzler (European Commission, JRC)
- Jessie Krailler (Procter & Gamble)
- Teresa Norberg-King (USEPA)
- Ryan Otter (MTSU)
- Joshua Phillips (MTSU)
- Hans Sanderson (Aarhus University)
- Nathalie Vallotton (Dow)
- Peter Wilson (Sanofi)
- Michelle Embry (HESI)

Committee Supporters



Ecological vs. Human Health Risk Assessment



Challenges:

- Protection target = all species, all ecosystems
- Many compounds lack data and are not well-studied
- Limited resources for testing
- Regulatory restrictions on vertebrate use
- Need tools for prioritization



EnviroTox Database & Tools

www.EnviroToxDatabase.org



Database of ~91K curated aquatic toxicity records; ~4K substances



User-friendly database filtering interface

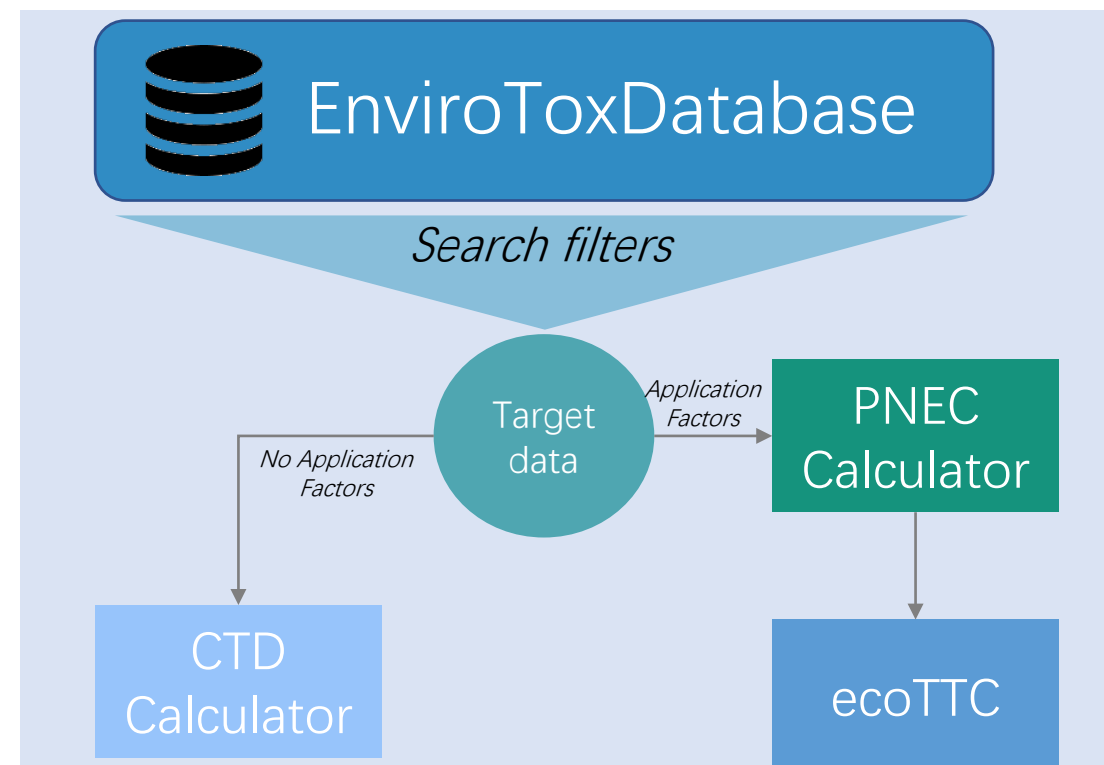


Freely available analysis tools:

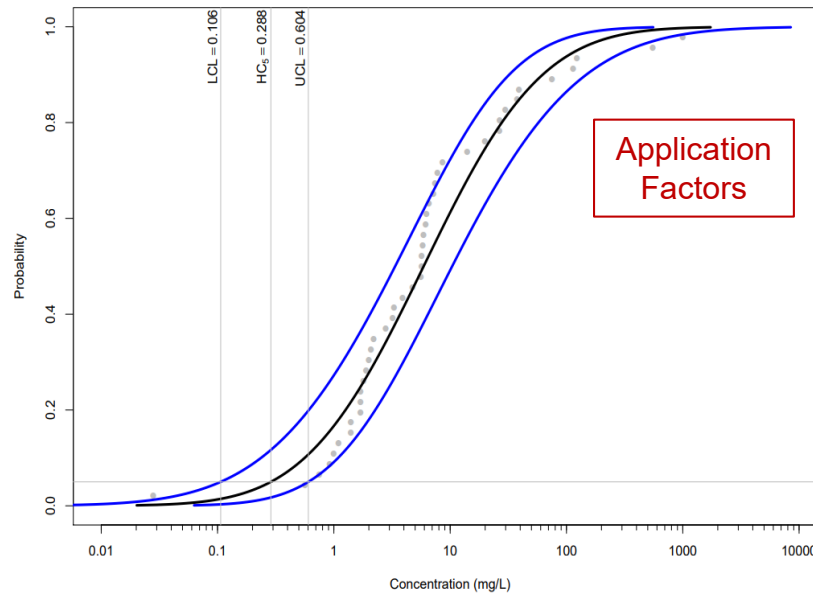
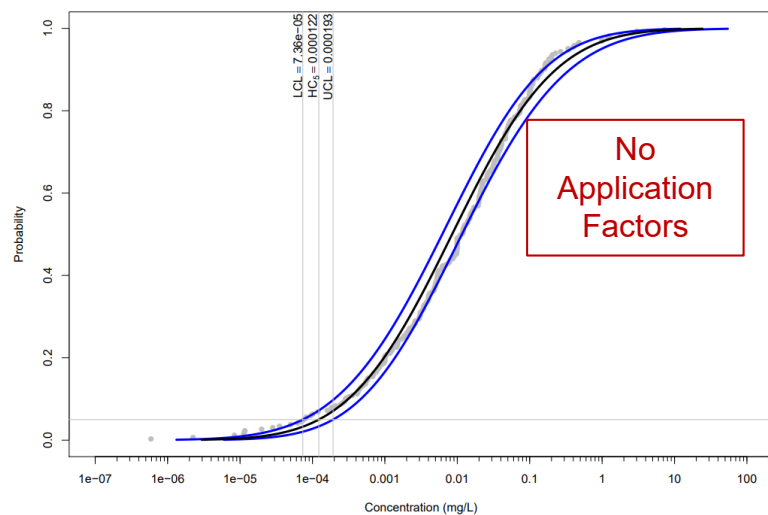
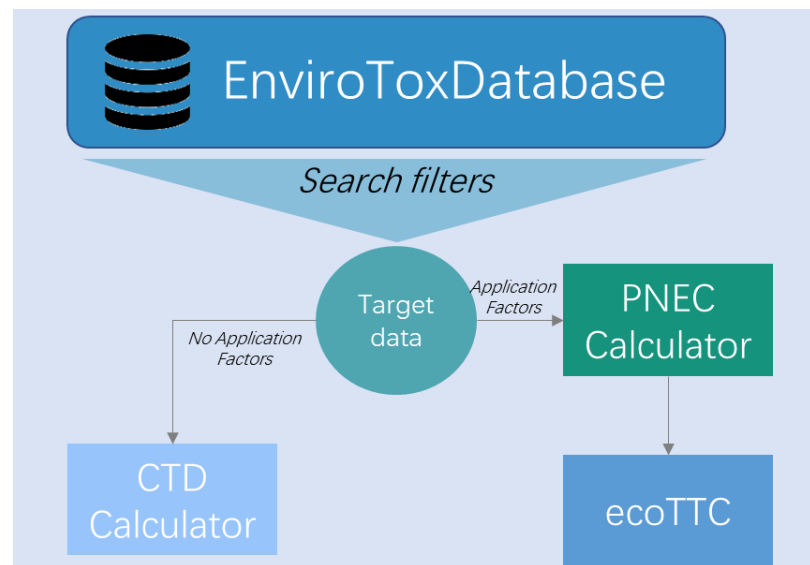
- PNEC calculator (US & Europe)
- ecoTTC distribution tool
- Chemical Toxicity Distribution (CTD) tool



Developed via a global, collaborative partnership with government, academia, and industry, managed by HESI



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Benefits to a distribution approach (ecoTTC or CTD)



Maximizes resources



Useful for data-poor chemicals



Enables rapid decision-making



Helpful for low-production chemicals



Utilizes existing knowledge



Supports read-across