

Workshop on Uncertainty Modeling in Dose Response *Dealing with Simple Bioassay Data, and Where Do We Go from Here?*

October 22-23, 2007

Resources for the Future

1616 P St. NW, Washington, DC

1st Floor Conference Room

<http://www.rff.org/rff/Cooke-Uncertainty-Workshop.cfm>

Agenda

Monday, October 22

8:30-9:30 *Continental breakfast*

9:30-9:45 **Welcome** Phil Sharp (*RFF President*)

9:45-10:00 **Introduction** George Gray (*EPA*)

Chairperson: Margaret MacDonell (*ANL*)

10:00-10:45 **Paper 1 – Benchmark Dose** Jeff Swartout (*EPA NCEA-Cin*)

10:45-11:00 **Reviewer A, *Math/Stats View*** Allan Marcus (*EPA*)

11:00-11:15 **Reviewer B, *Tox/Epi View*** Jouni Tuomisto (*KTL Finland*)

11:15-11:30 **Reviewer C, *Risk Analyst/Reg View*** Weihsueh Chiu (*EPA*)

11:30-11:45 *Break*

11:45-12:30 **Discussion**

12:30-1:30 *Lunch*

Chairperson: Dale Hattis

1:30-2:15 **Paper 2 – PI + Isotonic Regression** Roger Cooke (*RFF*)

2:15-2:30 **Reviewer A, *Math/Stats View*** Tom Louis (*Johns Hopkins*)

2:30-2:45 **Reviewer B, *Tox/Epi View*** Lorenz Rhomberg (*Gradient*)

2:45-3:00 **Reviewer C, *Risk Analyst/Reg View*** Rob Goble (*Clark*)

3:00-3:15 *Break*

3:15-4:00 **Discussion**

4:00-5:00 **Selected Topic:**

1) Combining Multiple Tumors Leonid Kopylev & Chao Chen (*EPA NCEA-DC*)

2) Uncertainty Inherent in "Biologically Based Models" Kenny Crump (*Louisiana Tech*) Van Landingham C, Subramaniam R., C. Chen

Tuesday, October 23

8:30-9:00 *Continental breakfast*

Chairperson: Lorenz Rhomberg (*Gradient Corp*)

9:00-9:45 **Paper 3 – Non-Parametric Bayesian** Tom Mazzuchi/Lidia Burzala (*Geo. Wash*)

9:45-10:00 **Reviewer A, *Math/Stats View*** David Smith (*U. Florida/RFF*)

10:00-10:15 **Reviewer B, *Tox/Epi View*** Chao Chen (*EPA*)

10:15-10:30 **Reviewer C, *Risk Analyst/Reg View*** Dale Hattis (*Clark U.*)

10:30-10:45 *Break*

10:45-11:30 **Discussion**

11:30-12:30 **Selected topics**

1) Uncertainty analysis of dose-response data using threshold bootstrapping

Jeff Swartout (*EPA*)

2) A case study of combining epidemiology and toxicology in a systematic way: TCDD-induced dental aberrations in humans and rats.

Jouni T. Tuomisto, Marjo Niittynen, Anna Karjalainen, Hanna Miettinen,
Matti Viluksela and Juha Pekkanen (*KTL Finland*)

12:30-1:30 *Lunch*

Chairperson: David Brussard

1:30-2:15 **Paper 4 – Model Averaging** Louise Ryan/Melissa Whitney (*Harvard*)

2:15-2:30 **Reviewer A, *Math/Stats View*** Mike Messner (*EPA*)

2:30-2:45 **Reviewer B, *Tox/Epi View*** Margaret Chu (*EPA*)

2:45-3:00 **Reviewer C, *Risk Analyst/Reg View*** Adam Finkel (*Princeton*)

3:00-3:15 *Break*

3:15-4:00 **Discussion**

4:00-4:30 **Selected Topics**

Hierarchical Dose-Response Modeling Ketra Schmitt, Kan Shao, and Mitchell Small

4:30-5:00 **Closing remarks** Roger Cooke (*RFF*)