

**SRA Dose Response Specialty Group (DRSG)**  
**Monthly Business Meeting Notes**  
**May 4, 2004**  
**3:30 - 4:30 pm EDT**

**Members/Attendees:** Peg Coleman, Mike Dourson, Gay Goodman, Lynne Haber, Ralph Kodell (President-elect), John Lipscomb (past-President), Peter McClure (Secretary-Treasurer), Mike Messner, Paul Schlosser (Trustee), Mike Zager (Vice-President)

**ITEMS OF DISCUSSION**

**1. Announcements**

The deadline for submitting abstracts for presentation at the 2004 annual meeting in Palm Springs has been extended to June 4.

The annual meeting planning committee will meet on June 21. Ron Brown and John Keller will attend and represent the DRSG. Ralph K. noted that Ron thought that the DRSG could endorse up to 7 sessions (e.g., symposia, round-table discussions, poster platforms).

Peter M. and Gary F. have noted some apparent discrepancies in the financial reports provided on April 13 and have presented some questions to Leslie Hushka. To date, answers to the questions have not been received. Peter and Gary will attempt to speak further with Leslie this month.

Ralph K. noted that an RSVP will be included in the announcement for the next teleseminar in order to promote interaction and recognition among the membership and to allow speakers to have some idea of their audience.

Mike Z. noted that the deadline for submitting extended abstracts for the 2004 Student Merit Award in Dose-Response Assessment has been moved to June 8. In addition to the prestige of peer recognition of an outstanding scientific contribution, the award will include a waiver of meeting registration, plus a minimum cash award of \$300. Mike noted that three organizations have pledged financial support for the award: \$100-200 from the Sapphire Group (communicated by Mike Gargas); \$100 from Environ (communicated by Justin Teegarden); and \$100 from Syracuse Research Corporation (communicated by Peter M.). Mike Z. has emailed an announcement of the student merit award competition to a wide range of institutions and graduate programs, and awaits receipt of extended abstracts from applicants.

**2. Discussion of Proposed Scientific Sessions**

Proposed scientific sessions, and whether or not they will be endorsed by the DRSG, were the principal topics of discussion.

No information has been presented for the following sessions, which had been discussed at earlier DRSG meetings: 1. *Development of dosimetry models for pregnant females and developing fetuses* (Greg Blumenthal, after the meeting, Gary F. learned that Greg still plans to submit a proposal to the program committee on this topic.) 2. *Methods for characterizing the variability in toxicity testing* (Jim Wilson).

Proposals, in various states of preparation, were discussed for the following sessions.

1. *Chemical Mixtures Health Risk Assessment Methods* (Co-chairs: Ralph K., Linda Teuschler)

Symposium format with 4 speakers

1. *Assessing Reproductive and Developmental Risks Posed by Drinking Water Disinfection Byproduct Complex Mixtures*. Glenn Rice, US EPA National Center for Environmental Assessment.
2. *Toxicological and Statistical Criteria for Defining Sufficient Similarity of Complex Mixtures*. Linda Teuschler, US EPA National Center for Environmental Assessment.
3. *Estimation of Cumulative Risk via Dose-Addition*. James J. Chen, US FDA National Center for Toxicological Research.
4. *The Interaction Based Hazard Index: Refining the Method Through Case Studies*. Richard Hertzberg, USEPA National Center for Environmental Assessment.

DISCUSSION: Some participants expressed concern that the session did not present a wide enough range of speakers working in the area of chemical mixtures health risk assessment; in particular that three out of the 4 speakers were from EPA. Other participants expressed support for the speakers as proposed. Ralph K. noted that he will discuss the possibility of including other speakers with his co-chair (Linda T.).

2. *US EPA's IRIS Program: Advancing the Application of New Science and Methodologies in Human Health Risk Assessment*. (Chair: Amy Mills; Gary Foureman?)

Poster platform discussion format

Preliminary Poster Titles/Topics

1. EPA's IRIS Program Overview and Directions
2. Harmonization of Cancer and Noncancer Health Effects in IRIS Assessments
3. Quantitative Dose-response Methods in IRIS Assessments
4. Application of PBPK Models in IRIS Assessments
5. Application of EPA's Chemical Mixtures Guidance to PAH Mixtures Assessment
6. IRIS Assessment of Acrylonitrile
7. IRIS Pilot Implementation of Less-than-Lifetime Reference Values

DISCUSSION: Some participants expressed concern that the technical scope of the poster session was not clearly defined, and that if other groups (for example, the American Chemistry Council or the Environmental Defense Fund) presented a proposal for a similar session on their risk assessment programs, the session might be viewed as having a biased focus. Others thought that the proposed session would be of interest to many society members. John L. indicated that he would relay the thoughts expressed in the discussion to Amy M. and Gary F.

3. *Chemical-specific adjustments in dose-response assessments* (Co-chairs: John L. and Harvey Clewell)

Round-table discussion format

John L. noted that two adjacent 90-minute sessions are proposed: 1) the first would involve 3 talks (one on guidance and recommendations for using chemical specific information in deriving or selecting uncertainty factors in dose-response evaluations and two discussing specific examples), followed by a discussion period; and 2) the second would involve talks on incorporating mode of action information into weight-of-evidence and dose-response evaluations and applying PBTK models for extrapolation across species and routes of exposure using vinyl chloride as an example, followed by a discussion period.

DISCUSSION: Participants expressed interest in the proposed session. It was agreed, however, that details of the session need to be better articulated before the session receives DRSG endorsement. John L. noted he and Harvey C. will be working on the details.

4. *Dose-Response Modeling from Pharmacodynamic Modeling* (Chair: Paul S.)

Symposium format with 4 speakers

1. *Emergent, Robust Non-linearity of Dose-Response Relations in Stochastic Transition Models.* Louis Anthony (Tony) Cox, Jr.
2. *A Feedback Model for Testicular-Pituitary Axis Hormone Kinetics and their Effects on the Regulation of the Prostate in Adult Male Rats.* Michael G. Zager, K. Potter, and Hugh Barton.
3. *Computational Modeling of Signal TransductionL Biostability and History-Dependent Activation.* Qiang Zhang and Rory B. Connolly.
4. *Modeling Estrogen Dose-Response Effects on the Menstrual Cycle.* Paul M. Schlosser, Leona Harris Clark, and James Selgrade.

DISCUSSION: It was agreed that this was a well developed proposal (complete with abstracts) and would receive DRSG endorsement.

5. *Microbial Dose-Response Assessment for Inhalation Exposures* (Chair: Peg C.)

Symposium format with 4 speakers

Microbial risk assessors looking to the future are considering analytical deliberative processes to provide more science-based interpretation of the available data and to develop dose-response models with a more mechanistic underpinning for human inhalation exposures to biological agents. Modeling techniques such as physiologically based dynamic infection models and non-linear mixed effects models are needed to support decision making for biological agents regarding clean-up and re-occupancy. The symposium addresses available data and models for some biological threat agents and future needs to support various risk analysis communities.

1. *Dose-Response on Inhalation of Anthrax from Multiple Species using Non-linear Mixed Effects Models.* Brandolyn Thran, US Army CHPPM.
2. *Modeling Person-to-Person Airborne Infection Risks.* Mark Nicas, UC Berkeley.
3. *Extrapolating to Aerosol Exposures from Surface Sampling.* W.P. Freihaut, Penn State University.
4. *Modeling TB Risks on a Commercial Airliner.* Kim Thompson, Harvard (invited, but no response to date)

DISCUSSION: During the teleconference, Peg C. noted that more work was needed to develop a proposal on the previously suggested topic of microbial dose-response and bioterrorism. Four unique pieces of work were subsequently identified on inhalation of bioterrorism agents. The last speaker must still be confirmed. An additional microbial DR symposium on Dave G.'s topic (*comparative risk*) could still be developed if Ralph K., Dave, or another DRSG member could do the organizational work.

6. *The role of mechanistic data in naphthalene toxicity* (Chair: Cynthia Mann, Exxon)

Lynne H. was asked by Cynthia Mann to bring this before the DRSG. Cynthia is proposing 7-8 speakers presumably in a double session; two speakers have been identified: Alan Buckpitt (UC Davis) and Lynne H. (TERA). It was noted that EPA had been invited to participate, but declined because their reassessment of inhalation cancer from

naphthalene was undergoing review. Further information on the proposed session was not available.

DISCUSSION: Some participants questioned whether there would be enough interest on this particular chemical to warrant a double session. It was agreed that current information was insufficient for DRSG endorsement at this time.

7. After all previously proposed sessions had been discussed, a new proposal was made by Gay Goodman for a session on *Negative Aspects of Advocacy Group Effects on Risk Assessments*.

DISCUSSION: Concerns were expressed as to whether there would be a balance of view points and whether such a topic might fit better under risk communication than under dose response. The meeting ended without a decision regarding sponsorship or endorsement by DRSG.