

SRA Dose Response Speciality Group (DRSG)
Monthly Business Meeting Notes
February 3, 2004
3:30 - 4:30 pm EST

Members/Attendees: Greg Blumenthal, Peg Coleman, Gary Foureman (President), Ralph Kodell, John Lipscomb, Peter McClure, Chandrika Moudgal (briefly), and Paul Schlosser.

Gary introduced the agenda items.

ITEMS OF DISCUSSION

1. Gary reported that Jonathan Weiner's (Duke University) proposal had been reviewed by members of the executive committee and deemed acceptable. The proposal is to undertake a review of how the term, "adverse effects", and related terms have been used across the array of U.S. statutes and regulations related to both human health effects and ecological risks. A budget of \$3000 was proposed: about \$2000 to cover a graduate research assistant's time, \$500 for support staff, and \$500 for books and materials. Gary and Peter will talk with Leslie Hushka (SRA Treasurer) and the accounting people at Society headquarters to discuss proper procedures for notifying Dr. Weiner to begin work on the project.
2. Meeting notes for the 2003 calendar year have recently been posted on the DRSG website.
3. John and Gary are exploring the possibility of a joint mixer with the Food and Water Specialty Group at the 2004 annual meeting.
4. Ralph reported on his plans for three 2004 DRSG teleseminars. The group expressed interest in the topics of these seminar and looks forward to their occurrence. There was some discussion of the possibility of including an additional teleseminar, if a "hot topic" arose within the next few months.
 - 1) Tuesday March 2, 2004 (3:30-4:30PM), Mike Luster. *Proposed mechanisms for arsenic carcinogenicity and implications for the shape of the dose-response curve.* Ralph will be obtaining slides from Dr. Luster and forward them to Paul for posting on the DRSG website. Ralph noted that the mechanistic information suggests that a threshold, "hockey stick", type of curve may be preferable to a linear relationship.
 - 2) Tuesday June 1, 2004 (3:30-4:30PM), Dave Gaylor. *Statistical analysis of nonmonotonic dose-response relationships: research design and analysis of nasal cell proliferation in rats exposed to formaldehyde.* Ralph indicated that the

recent paper in Toxicological Sciences (2004 77: 158-164) will form the basis of the presentation.

3) Tuesday September 7, 2004, Walter Piegorsch (Univ. of South Carolina): *Confidence bands for low-dose risk estimation with quantal response data*. The presentation will be based on a recently published paper in Biometrics (2003, 59: 1056-1062). Ralph explained that the work proposes statistical confidence "bands" that provide simultaneous coverage (confidence) at the stated level (e.g., 95%) for any of several Benchmark Doses that might be considered as points-of-departure. For example, a risk assessor might consider a 95% BMDL01, a 95% BMDL05 and a 95% BMDL10 in "shopping" for the most appropriate point-of-departure. If all of these are calculated separately, then the nominal confidence level will overstate the actual coverage for the BMDL that is chosen. Ralph notes that it is like the multiple-testing problem, but in an estimation setting. A title being considered for the presentation is "Multiplicity-Adjusted BMDLs." DRSG group members suggested that the presentation may be most useful to non-statisticians, if at least one case-study were included to illustrate the approach. Ralph agreed to talk with Dr. Piegorsch about this possibility.

5. DRSG Poster: Peg noted that a draft of the poster had been circulated earlier. Peg expressed the opinion that there were too many words and not enough visuals. Suggestions were made to include:

- 1) photographs of DRSG officers or DRSG members at the mixers or the student awardee (officers were requested to send jpeg files of themselves to John Lipscomb; Gary will check with Lori Strong to see if photos from the annual meeting are available; Peter to check with student award winner about photo),
- 2) the DRSG logo, and
- 3) a listing of the planned teleseminars for this year

Peg and John plan to prepare a version of the poster to set up at the Society of Toxicology meetings in Baltimore, March 21- 25, 2004.

6. Proposals for symposiums at the next annual meeting were discussed. -

- 1) Development of dosimetry models for pregnant females and developing fetuses (Greg thought he could bring together 4 speakers on this topic);
- 2) Development of methods to predict and measure dose-response relationships for mixtures of agents and methods to predict risks from exposure to mixtures of agents (Ralph had earlier suggested that James Chen, NCTR, may be interested, and John indicated that Linda Teuschler may be another possibility);
- 3) Development of models to predict toxicodynamic responses to chemical, physical, or biological agents (Paul thought he could gather 4 appropriate speakers on this topic including Rory Connolly and Tony Cox);

- 4) Methods for characterizing the variability in toxicity testing (Jim Wilson had mentioned this as a possible topic at the December meeting, but was not present at the February meeting to discuss further);
- 5) Microbial risk assessment (John expressed interest in preparing a proposal for a symposium in microbial risk assessment).

Proposals are to be prepared for presentation at the May meeting of the SRA Program Committee.