UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
HUMAN STUDIES REVIEW BOARD (HSRB)
PUBLIC TELECONFERENCE MEETING
NOVEMBER 13, 2007
1:00 pm -3:00 pm (Eastern Time)
HSRB MEETING FOR REVIEW AND APPROVAL OF
DRAFT JUNE 27-29, 2007 HSRB MEETING REPORT *
HSRB WEB SITE http://www.epa.gov/osa/hsrb/
Docket Telephone: (202) 566-1752
Docket Number: EPA-HQ-ORD-2007-0403
Meeting location via telephone only
Members of the public may obtain the call in number at (202) 564-5275

• **1:00 PM Introduction and Identification of Board Members** – Celia Fisher, Ph.D. (HSRB Chair)
• **1:10 PM Meeting Administrative Procedures** - Paul Lewis, Ph.D. (Designated Federal Officer, HSRB, OSA, EPA)
• **1:15 PM Meeting Process –** Celia Fisher, Ph.D. (HSRB Chair)
• **1:20 PM Public Comments**
• **1:30 PM Board Discussions and Decision on Report** - Celia Fisher, Ph.D. (HSRB Chair)

A. Proposed Carroll-Loye Picaridin Insect Repellent Efficacy Study LNX-001

1. If the proposed research described in Protocol LNX-001 from Carroll-Loye Biological Research is revised as suggested in EPA's review, does the research appear likely to generate scientifically reliable data, useful for assessing the efficacy of the test substances for repelling mosquitoes?

2. If the proposed research described in Protocol LNX-001 from Carroll-Loye Biological Research is revised as suggested in EPA's review, does the research appear to meet the applicable requirements of 40 CFR part 26, subparts K and L?

B. Proposed ICR Picaridin Insect Repellent Efficacy Study

1. If the proposed research described in ICR's proposed picaridin protocol is revised as suggested in EPA's review, does the research appear likely to generate scientifically reliable data, useful for assessing the efficacy of the test substances for repelling mosquitoes?

2. If the proposed research described in ICR's proposed picaridin protocol is revised as suggested in EPA's review, does the research appear to meet the applicable requirements of 40 CFR part 26, subparts K and L?

C. Completed Inhalation Study with Acrolein

1. Please comment on whether the study is sufficiently sound, from a scientific perspective, to be used to estimate a safe level of acute inhalation exposure to acrolein.

C. Completed Inhalation Study with Acrolein (cont'd)

2. Please comment on the following:
   a) Is there clear and convincing evidence that the conduct of the study was fundamentally unethical?
   b) Is there clear and convincing evidence that the conduct of the study was significantly deficient relative to the ethical standards prevailing at the time the research was conducted?

D. Completed Studies on the Therapeutic and non-Therapeutic Effects of Administration of 4-aminopyridine

1. Please comment on whether the studies are sufficiently sound, from a scientific perspective, to be used to derive a point of departure for estimating risk to humans from exposure to 4-AP.

2. Please comment on the following:
   a) Is there clear and convincing evidence that the conduct of any of the three clinical studies (Segal et al., 1999; Grijalva et al., 2003; Van Diemen et al., 1993) was fundamentally unethical?
   b) Is there clear and convincing evidence that the conduct of any of the clinical studies was significantly deficient relative to the ethical standards prevailing at the time the research was conducted?

E. Design of Research on the Levels of Exposure Received by Pesticide Handlers

<u>Risks and Benefits of Handler Research</u>

Will the Task Forces' Governing Documents considered in conjunction with the additional study- and scenario-specific information specified above provide an adequate basis for assessing whether the risks of conducting a particular study are justified by the expected benefits of the proposed research? If not, what additional information should be provided for an IRB, EPA, and the HSRB?

<u>Addressing Potential Sources of Underestimation Bias</u>

1. Has EPA appropriately characterized the limitations on the scientific usefulness of a handler database that does not include data characterizing the efficiency of residue removal procedures? If not, what limitations have been overlooked?

2. Has EPA identified the relevant scientific and practical considerations affecting the choice to include biomonitoring, and has EPA appropriately characterized the limitations on the scientific usefulness of the resulting data if no biomonitoring is conducted? If not, what other considerations should bear on a decision to conduct biomonitoring in addition to WBD?

<u>QA and QC Controls</u>

Do the Task Forces' Standard Operating Procedures appear adequate to ensure that the data resulting from the proposed research will be of high quality? If not, what other Quality Assurance or Quality Control procedures need to be addressed?

E. Design of Research on the Levels of Exposure Received by Pesticide Handlers (cont'd)

Design of scenario-level sampling strategies

With regard to the AHETF and AEATF plans to conduct their proposed handler research using purposive diversity sampling strategies:

1. Has EPA identified the relevant scientific and practical considerations affecting the choice of a strategy for sample selection? If not, what other considerations should bear on the choice?

2. Does the HSRB agree with EPA that the Task Forces should provide scenario-specific information about the availability of data to identify significant variables (other than AaiH) potentially influencing exposure and about the feasibility of developing a sampling strategy to address those variables quantitatively? If not, what additional information is needed?

3. Has EPA appropriately characterized the limitations on the scientific usefulness of the resulting data attributable to the choice of the sampling strategy? If not, what has EPA overlooked?

Statistical justification for number of clusters and monitoring units

What additional information, if any, would the HSRB need to assess the adequacy of the justification for the number of clusters and number of MUs in specific AHETF and AEATF study proposals?

Within-Worker variability

Has EPA appropriately characterized the limitations on the scientific usefulness of a database that does not include repeated measures? If not, what limitations has EPA overlooked?

Subject recruitment and enrollment issues

1. Does the Board agree that the Governing Documents and associated SOPs of the AHETF and AEATF research programs include comprehensive and appropriate protections for human subjects of the research? If not, what has been overlooked?

2. In singling out the handling of language differences as an area requiring further refinement, has EPA overlooked other areas in need of revision? If so, what?

• **2:45 PM Summary and Next Steps -** Celia Fisher, Ph.D. (HSRB Chair) and Paul Lewis, Ph.D. (Designated Federal Officer, HSRB, EPA)
• **3:00 PM Adjournment**

*Please be advised that agenda times are approximate. For further information, please contact the Designated Federal Officer for this meeting, Crystal Rodgers-Jenkins via telephone: (202) 564-5275 or email: rodgers-jenkins.crystal@epa.gov.