From:	Matt Todd <ToddM@api.org>
Sent:	Monday, September 13, 2004 7:53 PM (GMT)
To:	BHRC Oversight Committee (E-mail) <benzconsort-oc@listserve.api.org>; BHRC Technical Committee (E-mail) <benzconsort-tc@listserve.api.org>; BHRC Communications Committee (E-mail) <benzconsort-cc@listserve.api.org>
Subject:	2004 SHS Annual Meeting Summary
Attach:	2004-09-09_Asilomar Summary_2004 draft.doc

BHRC Members:

Please review and provide comments on the attached 2004 SHS Annual Meeting Summary document by September 27, 2004.

Regards,
Matt

Matthew Todd
Regulatory Analysis and Scientific Affairs
American Petroleum Institute
1220 L Street NW
Washington, DC 20005
p: (202)682-8319
f: (202)682-8031
www.api.org

DRAFT

2004 Shanghai Health Study Annual Meeting

August 17 - 19, 2004
Asilomar Conference Center
Monterey, California

For the second consecutive year, participants gathered at the Asilomar Conference Center in Monterey, California for the Annual Meeting of the Shanghai Health Study ("SHS"). The meeting brought together members of all the various groups involved with the study including the Principal Investigators along with a few Chinese and American research team members, the Scientific and Ethical Review Panel members and the industry sponsors.

The overall objective of the meeting was to provide a forum for discussion and the free exchange of information about the study's progress to date and expectations going forward. The two-day meeting included an open plenary session intended to discuss the progress of the study to date as well as closed meetings of the Scientific and Ethical Review Panel members and the Principal Investigators.

The following is a summary of the information presented by the panelists in the plenary session on August 17th and the remarks made by the chairs on the closing day. The presentations are available in their entirety on the SHS web site (www.shanghaihealthstudy.org).

Opening Session

The opening plenary session began with remarks from the Chair of the Benzene Health Research Consortium Oversight Committee, Ms. Patsy Clegg of Shell Chemicals. On behalf of her own company and the other industry sponsors of the study – BP, ChevronTexaco, ConocoPhillips, ExxonMobil, and Marathon – Ms. Clegg welcomed all of the participants back to Asilomar and thanked everyone involved for their work over the past year.

Ms. Clegg emphasized that, as part of their ongoing commitment to product stewardship, the sponsors of the study believe that the insights and understanding about the potential effects of benzene exposure that will ultimately be gained from this work will be important to help ensure that industry can continue to effectively manage and minimize risk. She also highlighted the importance of the cooperative and collaborative relationships that have been established among the researchers, the Scientific Review Panel and the Ethics Review Panel and the role that the groups' mutual commitment to the research has played – and will continue to play – in moving the study forward.

Ms. Clegg then introduced the moderator for the plenary session and Chair of the Benzene Health Research Consortium Technical Committee, Dr. Patrick Beatty of ChevronTexaco. In his brief remarks, Dr. Beatty provided an overview of the meeting's agenda noting that the day's panelist presentations would include an update on the recent activities of the Scientific and Ethics Review Panels and an overview of the scientific work-to-date by the Principal Investigators involved in the research.

Ethics and Scientific Review Panel Activities

The first panelist was Dr. Jerry Rice, Chair of the study's Scientific Review Panel (SRP) and Member *ex* officio of the Ethics Review Panel (ERP).

Dr. Rice began by reviewing the role and responsibilities of the ERP, noting that its primary function is to ensure that the research conducted under the study meets internationally accepted

ethics standards and reflects relevant cultural norms in Shanghai. Dr. Rice also took the opportunity to introduce his colleagues on the ERP: Juhana Idänpään-Heikkilä, Geneva; Zong-Liang Xu, Shanghai; Ellen Clayton, Nashville; and Paul Lombardo, Charlottesville. (He noted that with the addition of Dr. Clayton and Dr. Lombardo, the ERP had doubled its regular membership in 2004.)

Dr. Rice reported that in the past year, the SRP had reviewed the semi-annual progress reports and had proposed various revisions to ME, DP and CC studies to facilitate timely changes and minimize potential disruptions to the study. He also emphasized the study's progress to date and the shift in focus from establishing facilities and implementing protocols to striving to achieve quality of data and looking ahead toward future presentations and publications.

Progress Reports 2004 – Updates from the Researchers

Building Institutional Relationships through the Shanghai Health Study - Dr. Fu Hua

One of the most tangible measures of the study's importance is the high esteem to which the medical community in Shanghai holds this work and the level of cooperation and collaboration that has been established between Fudan University and the 30 Shanghai hospitals that have allied themselves with the Joint Sino-U.S. Clinical and Molecular Laboratory (JCML). Professor Fu Hua, Deputy Dean of the Fudan University School of Public Health and one of the Co-Principal Investigators of the Case-Control Study of AML and NHL in Shanghai, provided a detailed overview of the interrelationships and support structure that has been developed for the project in Shanghai.

Professor Fu also discussed the importance of having the JCML facilities up and running as a fully operational, state-of-the art diagnostic and clinical facility. He noted that the official launch ceremony for the study and the "grand opening" of the laboratory at Fudan was held in December 2003. With broad participation by Chinese government and health officials, the U.S. Consul General and the directors of many of the participating hospitals the event was truly a success. It received some welcome media coverage with reports appearing on television, in Shanghai newspapers and on the Internet – prompting public interest in the project.

Quality Assurance/Quality Control Approaches in the Shanghai Health Study - Dr. Liang You-zin

Following Dr. Fu, Dr. Liang You-xin of the Fudan University School of Public Health discussed the importance of the quality control and quality assurance safeguards that have been integrated into the study. Dr. Liang provided an extensive overview of the policies and procedures that have been established for the SHS which are intended to:

- Monitor each study process to ensure the facilities, equipment, personnel, methods, practices, records and controls are in conformance with the study protocol; and
- Ensure that the QA/QC process runs smoothly.

Dr. Liang noted that there are certain aspects of the study that are easily biased by uncertainties and other potential confounders, adding that the study's QA/QC safeguards have been – and will continue to be – developed, implemented and gradually adapted and improved as the study itself continues to progress.

Case Control Study of AML and NHL in Shanghai - Dr. Otto Wong

Dr. Otto Wong of Applied Health Sciences then provided an update on the case-control study in Shanghai. Dr. Wong reported that the number of JCML-confirmed AML and NHL cases accumulated to date is proceeding at, close to the projected pace and that thus far, no cases or controls have refused to participate in the study. However, he also reported that a February 2004 review of the questionnaires revealed an irregularity in the outpatient controls from two hospital sources suggesting that the controls were inappropriately selected (or "recruited") for the study.

With the concurrence of SRP and the ERP, corrective measures were quickly implemented and the inappropriate controls were replaced. In addition, permanent changes have been made to the selection process to require that all controls be selected from inpatients and that their selection will be closely monitored going forward.

Molecular Epidemiology Studies in Shanghai - Dr. Robert Schnatter

Dr. Robert Schnatter, the senior scientific advisor for Occupational Health at ExxonMobil Biomedical Sciences, Inc. and a Co-Investigator in the Shanghai Study then provided an update on the status of the two-phased molecular epidemiology study. Dr. Schnatter reported the phase one efforts to define dose response relationships for past benzene exposure and identify the most sensitive measures of effect for items recorded in routine exams was going very well.

- Several factories have agreed to participate and formal data collection is underway for 3-4 factories
- Preliminary analyses has been on one factory (Shanghai rubber factory)

However, he noted that efforts to recruit factories and current workers to participate in the second phase of the study have been somewhat more challenging.

- Three factories have provided data (one shoe factory and two rubber factories)
    - Rubber factories: relatively high exposures (avg ~30 ppm)
    - Shoe factory: lower exposures (avg ~2 ppm)
- To date, 114 workers have been recruited

Dr. Schnatter and his team are continuing to seek factories and workers through traditional means, but they are also exploring alternative options for recruitment.

Exposure Assessment for Shanghai Studies - Dr. Robert Schnatter for Tom Armstrong

On behalf of his colleague Tom Armstrong, an industrial hygienist at ExxonMobil Biomedical Sciences, Inc. who was unable to attend the meeting, Dr. Schnatter also presented an overview of the occupations and work environment exposure assessments currently underway in Shanghai. The presentation described the "tiered design" of the case-control exposure assessment, which is intended to provide a more accurate assessment of the case-controls. He noted that the hospital-based case-controls present diverse work histories, time periods and industries and, as a result, pose a number of exposure assessment challenges. The implementation of a tiered approach (including secondary questionnaires) to identify different types of workplace exposure helps to mitigate those challenges and identify the case-controls that were specifically exposed to benzene.

Again, Dr. Schnatter reported that data gathering and measurement of the workplace environments has proved challenging. Accessing and using the IPHS database has been more challenging than the teams had originally envisioned but remains useful at a qualitative to semi-quantitative level. The team will continue to pursue more work site inspections and reassessments will continue as the project further matures and further data are available.

Shanghai Health Study – Clinical Aspects - Dr. Richard Irons

The final speaker for the plenary session was Dr. Richard Irons, Director of the Molecular Toxicology and Environmental Health Sciences program at the University of Colorado Health Science Center and Principal Investigator and Laboratory Director for the Shanghai Heath Study. Dr. Irons confirmed that there are now thirty hospitals participating in the study in Shanghai and that, since January of this year, the laboratory has been accruing cases at nearly double the rate that the team had originally predicted. Dr. Irons also suggested that, while the data gathering and analysis is still at a very preliminary stage, based on early experience it appears that the study will indeed make a difference and help bring new clarity to the field.

The remainder of the first day and the first half of day two provided time for the ERP and the SRP to meet to together and wit the Principal Investigators to discuss both the current status of the study and future actions.

Closing Session

In the closing session on day two, Dr. Jerry Rice took the floor once again to report on the deliberations of the ERP and the SRP. Most notably, Dr. Rice discussed the SRP recommendations that the previous WHO classification, which held that leukemias are fundamentally different from solid tumors of the same cell type, should be replaced with the new WHO classification in which lymphoid tumors of a given cell type are a single entity that may present either as leukemia or lymphoma. The panel also recommended that in the case-control study all cases of lymphoid neoplasms should be considered to evaluate possible causal effects of benzene exposures.

The SRP also reaffirmed the importance of accurate exposure assessments to achieving the goals of all three studies – seeking to establish dose-effect relationships between benzene exposure and adverse health consequences. The panel stressed that notwithstanding the difficulties encountered with the task, making exposure assessments at a comparable level of sophistication to what has been achieved by the JCMLL in making diagnoses should be given the highest priority.

In addition, Dr. Rice reported that the SRP and the ERP strongly believe that the JCML should continue to operate, providing diagnostic services and support for research long after the SHS concludes in 2006.

Finally, in closing, Patsy Clegg once again thanked everyone in attendance for their efforts, noting that the study has taken great strides in a years' time and that everyone involved should be proud of the progress that has been made. She also noted that there are elements of the study that are proving a bit more difficult to achieve than it had originally been envisioned, however, she expressed her confidence that through the discussions of the SRP, the ERP and the principal investigators appropriate and workable solutions will be found to address the issues that remain.

Ms. Clegg also announced that the 2005 meeting would be held in Shanghai the first week of November.