

Board of Scientific Counselors advises NTP on draft concepts and more

By Robin Mackar

The NTP Board of Scientific Counselors (BSC) met (<http://ntp.niehs.nih.gov/?objectid=06F60B53-BA64-97D2-77E9F252444E50C0>) April 17-18 in Rodbell Auditorium to provide input on several draft evaluation concepts and evaluate findings in draft reports recently peer-reviewed.

Topics included Report on Carcinogen (RoC) draft concepts for cobalt, (http://ntp.niehs.nih.gov/ntp/about_ntp/bsc/2014/april/draft_oroc_cobalt_concept_508.pdf) goldenseal root powder,

(http://ntp.niehs.nih.gov/ntp/about_ntp/bsc/2014/april/draft_oroc_gldnseal_concept_508.pdf)

and selected viruses;

(http://ntp.niehs.nih.gov/ntp/about_ntp/bsc/2014/april/draft_oroc_viruses_concept_508.pdf)

the peer-review outcome of four draft technical reports; and two draft concepts from the NTP Office of Health Assessment and Translation (OHAT).

Report on Carcinogens

Ruth Lunn, Dr.P.H., director of the RoC office, summarized the December peer-review meeting on ortho-toluidine, used to make rubber, and the wood preservative pentachlorophenol and by-products of its synthesis. The new BSC chair, Lisa Peterson, Ph.D., of the University of Minnesota, attended the peer-review meeting as BSC liaison. "The science NTP presented was strong and discussions among the reviewers and NTP were quite animated and constructive," Peterson said.

Gloria Jahnke, D.V.M., presented the draft RoC concept on Epstein-Barr virus, human immunodeficiency virus type 1, human T-cell lymphotropic virus type 1, Kaposi sarcoma-associated herpes virus, and Merkel cell polyoma virus. She noted that NTP will prepare a separate monograph for each virus, but RoC listing, should it occur, would include all the viruses together. The RoC already lists 3 viruses as known to be human carcinogens.

After the presentation by Diane Spencer of NTP on the draft RoC concept for the popular botanical supplement goldenseal root powder, BSC members discussed relevant doses, studies that should be included in the evaluation, and how to consider other ingredients in goldenseal preparations, before offering support for moving forward.

Spencer also addressed the draft RoC concept for cobalt, a naturally occurring metal. NTP and BSC discussed what mechanisms might drive the development of tumors noted in some studies and what forms of cobalt should be evaluated. Overall, the board expressed support for moving forward with this concept, but several reviewers commented that NTP should specify the forms of cobalt to be reviewed.

Technical reports

NTP toxicologist Chad Blystone, Ph.D., updated the board on the October peer-review meeting for the draft technical reports on cobalt metal, vinylidene chloride, tetrabromobisphenol A, and glycidamide.

Richard Miller, D.V.M., Ph.D., of GlaxoSmithKline and BSC liaison to that meeting, gave positive feedback on both the meeting itself and the studies



Birnbaum provided updates about the budget, strategic plan, and scientific advances. (Photo courtesy of Steve McCaw)



Blystone presented four draft NTP technical reports that were peer-reviewed in October. (Photo courtesy of Steve McCaw)



New BSC member Milton Brown, M.D., left, of Georgetown University Medical Center, and Gayle DeBord, Ph.D., who serves as the National Institute for Occupational Safety and Health liaison to NTP. Brown said many people use goldenseal for a variety of ailments, including as an alternative to some cancer treatments. (Photo courtesy of Steve McCaw)

investigating molecular signatures of the tumors.

Draft concept presentations

Kembra Howdeshell, Ph.D., of OHAT, presented the draft [concept](http://ntp.niehs.nih.gov/ntp/about_ntp/bsc/2014/april/ohat_concept_appo_508.pdf) (http://ntp.niehs.nih.gov/ntp/about_ntp/bsc/2014/april/ohat_concept_appo_508.pdf) for evaluating literature on pregnancy outcomes associated with traffic-related air pollution. She described her team's preliminary literature search of nearly 18,000 unique scientific references, pared down to those addressing health effects, and finally to about 300 studies that included pregnancy outcomes. "When we found this good pocket of literature on pregnancy outcomes, we decided to focus our evaluation on the associations between pregnancy outcomes and traffic-related air pollution," Howdeshell said.

David Dorman, D.V.M., Ph.D., of North Carolina State University, and Sonya K. Sobrian, Ph.D., of Howard University College of Medicine, stressed the need to more clearly define what is meant by traffic-related air pollution. "You are taking on a daunting subject," Sobrian said. Both suggested that OHAT wait until the CDC completes its evaluations on pregnancy outcomes before proceeding too far with this concept.

NIEHS and NTP Director Linda Birnbaum, Ph.D., and NTP Associate Director John Bucher, Ph.D., both thanked the board for their helpful comments on this issue. "Your comments are making us realize how difficult it is to evaluate a project so early in the process. We will give more thought into how to get public input early," Birnbaum said.

Another draft concept Howdeshell presented to the board was to systematically review the scientific evidence for adverse health effects associated with occupational exposure to cancer chemotherapy agents. The BSC strongly supported pursuing this evaluation.

(Robin Mackar is the news director in the NIEHS Office of Communications and Public Liaison, and a frequent contributor to the Environmental Factor.)



Dorman had insightful comments and questions on many of the meeting topics. (Photo courtesy of Steve McCaw)



Lisa Peterson, Ph.D., center, of the University of Minnesota, served ably as the BSC chair, with Bucher, left, and NTP Deputy Division Director for Science, Nigel Walker, Ph.D. (Photo courtesy of Steve McCaw)



BSC members Robert Chapin, Ph.D., left, of Pfizer, and Sobrian discussed some of the concepts being presented during a break. (Photo courtesy of Steve McCaw)



Howdeshell presented two draft OHAT concepts at the meeting, receiving an abundance of welcome comments from the BSC. (Photo courtesy of Steve McCaw)



BSC member Iris Udasin, M.D., of Robert Wood Johnson Medical School, was especially supportive of the OHAT draft concept related to occupational exposure to cancer chemotherapy agents. (Photo courtesy of Steve McCaw)



Lunn, left, and Jahnke review their slides together before their presentations. (Photo courtesy of Steve McCaw)



RoC's Spencer gave a show-and-tell of goldenseal root powder, which can be easily purchased at local stores. (Photo courtesy of Steve McCaw)

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