

(Amended Nov. 16, 2000 to include suggestion of creation of ACL-0 containment level)

Date: Nov. 1, 2000

Event: Arthropod Containment Guidelines (ACG) Meeting held in conjunction with the American Society of Tropical Medicine and Hygiene Meeting

Time: 6:00-8:00 p.m.

Place: Westin Galleria Hotel, Houston, Texas

Subject: Summary of meeting held to receive responses to the ACG v. 2.2 from ASTMH meeting attendees and members of the draft committee.

The meeting was divided into two parts:

1. Presentation of the essential elements of the Guidelines
2. Responses to the Guidelines and issues that should be addressed.

### 1. Essential Elements of the Guidelines

Kate Aultman and Mark Benedict presented an overview of the Guidelines including the impetus, development process, rationale, previous publication venues, and content. It was emphasized that the Guidelines are modeled on BMBL, are guidelines and recommendations, are outcome rather than method based, and the ACL generally parallel the BSLs. Novel features that distinguish these Guidelines from BMBL were also noted: biological containment of arthropods is considered as a safety consideration, whether the arthropod is exotic or indigenous is considered, and the Guidelines recommend that arthropods should be shipped in the same containers and under the same conditions as the agents they may carry. Mark Benedict also presented a hand-written decision tree that demonstrated how the assignment of an arthropod to a containment level is generally made. This was written in response to concerns by Anthony James that the Table 1 of v 2.2 gave little guidance about how one would assign an arthropod to the appropriate level. (A revised presentation-quality

representation of this follows this summary.) Kate also presented the questions that the committee would like respondents to address in their comments.

## 2. Responses to the Guidelines and issues that should be addressed.

Mark summarized responses received from Tony James:

The Guidelines would have little effect on laboratories that are already operating under BMBL guidelines. However, the Guidelines do serve a useful purpose of codifying practices for the benefit of laboratories that are proposing research to Institutional Biosafety Committees.

Mark also represented the responses received from John Peloquin:

The Guidelines may be applied to insects other than arthropods of public health importance, many of which are not harmful, and indeed may be beneficial. The Guidelines place all insects in an unfavorable light, and the introduction should acknowledge this fact. The safety of releasing some transgenics is overwhelmed by a general tone of risk in the Guidelines.

Malcolm Fraser:

The guidelines proposed were reasonable and I don't represent any hindrance to transgenic research, particularly when working with non-autonomous elements. He is apprehensive about working with transgenic insects having autonomously mobile elements and considers these elements to be unknowns. And much like pathogens, they may not necessarily be harmful for the investigators so much as for the insect species or non-target arthropods. Since we have little information regarding mechanisms of horizontal transfer, he feels that containment of autonomously transformed insects should approach Level III and views these autonomous elements essentially as infectious DNA, from an evolutionary standpoint.

General Discussion:

Several people expressed the concern that while the Guidelines might be developed explicitly as guidelines, Institutional Biosafety Committees may use them as rules that would place an unwarranted burden on research programs by requiring excessive practices and facility renovations. Most agreed that though language in the document stressing that the ACG are guidelines was warranted, it would probably not prevent IBC from misusing them.

There was a general consensus that the ACG would likely have an effect beyond the US audience for which it is intended. It was recommended that the Guidelines be sent to international researchers and WHO for comment.

MQB received comments from two persons privately that the possibility of increased risk due to using particular strains (insecticide resistant, cold tolerant) should be given more prominence in the document. Moreover, use of disabled strains was recommended to enhance biological containment, and this should be given more prominence.

Much discussion centered on field site research. Tom Scott particularly felt that the field sites should be given a special status that recognized the impracticability of many of these measures. Moreover, the absence of a real attempt to contain the material was proposed as an exempting factor. Tom Scott agreed to write a section that addresses field-site research for consideration by the draft committee. Many persons concurred regarding the creation of an ACL-0 category to which field sites would generally belong.

It was clear that two factors distinguished field sites: absence of transport of material to locations distant from where it was collected, and no colonization is intended.