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## *Dinner Addresses*

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### **Q&A**

*Mary Clutter (National Science Foundation, Washington, DC):* I applaud your efforts on your plans for the Safety First organization. On one of your committees you have people who represent companies from other countries—have you had much discussion about coordinating your efforts with other countries? You know there is a huge debate about what is going on.

*Kapuscinski:* You are right about that and we are very aware of it. Actually, from the outset, we wanted to work at an international scale, but didn't have the resources to start that. However, at our workshop last year, which was financed by the University of Minnesota, people came from Europe and as far away as Kenya. Many others wanted to attend and asked for sponsorship for their travel but we didn't have the resources. In the past year we have obtained a grant from Agency for International Development (AID) under their new Biotechnology and Biodiversity Interface (BBI) program, which, although primarily a research project includes funds for biosafety training workshops in years 2 and 4; in this case the focus is on Thailand. That got the attention of AID and we were invited to go make a presentation on the Initiative. We are now fundraising with the objective of working with people from other countries. We are in contact with the international centers—last week I had telephone discussions with the director of the International Maize and Wheat Improvement Center (CIMMYT) in Mexico, for example, and we are talking to people at the Global Environment Facility. I was recently appointed to the Global Environment Facility's Scientific Advisory Panel.

The short answer to your question is we would like to work at the international level. We think that is really important. We recognize that the deliberative process may be more difficult in other cultural settings, but we think it is important to attempt it. We had to start somewhere and it made sense to start in our own backyard.

*Anthony Shelton (Cornell University, Ithaca, NY):* It sounds like a very interesting program. I'm trying to understand the scope of it. You talked about international, what about at the national level—is there coordination with other land grant universities, and who is funding it for the long-term? Will this be a model for other consortia or are you hoping to be the national center?

*Kapuscinski:* We are proceeding day by day so I haven't gone as far as thinking in terms of a national center. We like to work in a collaborative coalition building mode, so if other land grant universities find this intriguing enough to get involved that would be great. We are developing from one phase to the next and currently the bulk of our funding is coming from the Pew Initiative on Food and Biotechnology with infrastructure support from the university. We will be working with our board to put together the resources to take the next step, and the door is open for any person or coalition who would like to get involved. We are not interested in keeping it to ourselves—we are interested in solving a problem and we think we have a viable means of achieving success.

*Shelton:* Primarily, are University of Minnesota resources going into this, or at least faculty time?

*Kapuscinski:* And funding from the Pew Initiative on Food and Biotechnology. We are doing this one phase at a time. Our experience has been that it is more important to take the time to build relationships and put at least some of the initial pieces together than to think immediately on the larger scale. That will come if people are interested and if they see that the process will be helpful.

In forming the working groups, we must bring in additional resources. Obviously we will draw on scientists, communication specialists, and people of varied expertise from the land grant universities across the country. We will look for people in industry of greater diversity, hopefully, than those on the board and Steering Committee and also from consumer and public-interest groups. We want to work with people who are serious about negotiating constructively. We are not interested in people whose objective is to obstruct the discussion. We intend to establish ground rules to achieve an open process with negotiation in good faith.

*Marshall Martin (Purdue University, West Lafayette, IN):* Could you clarify how you plan to coordinate dialogue and interact with regulatory and other government agencies.

*Kapuscinski:* Although I and other members of our group have been having informal conversations with people in regulatory agencies, we thought it was more important to initiate conversations between the producers of technology and potential users, taking a cue from the aircraft industry. We have known all

along of the need, at the right moment, to interact with regulatory agencies. We invited them to our workshop last year, but only a few were able to come because of administration transition, *etc.* If we get far enough along within the next 6 months in terms of forming working groups and we have the resources in place then members of the Executive Advisory Board will go to Washington DC for discussions with the top people in the regulatory agencies. Some of the people on our board have a lot of experience in the regulatory world.

We have had discussions on whether some FDA staff, for example, should be directly involved in the working groups. It's not clear whether they would be comfortable, as there could be a conflict of interest—but there may be a possibility of involvement in a technical advisory role. We actually invited some federal people to serve as collaborators on a research proposal that was submitted to a federal funding agency. There should be ways to work this out. We do not want to duplicate what the federal agencies are doing. The idea is to do something that will be win-win.

*Aijit Srivastava (Michigan State University, East Lansing, MI):* You made reference to food-safety engineers. Could you elaborate? Are you thinking of someone with engineering credentials?

*Kapuscinski:* Well, I actually used the term safety engineer. I didn't specify if it was food safety or environmental safety, and we are still considering whether we should use the word engineer or safety professional. We wish to have a recognized career path, for example in the biotech world as a safety expert working at company X or as part of the biotechnology staff at APHIS at USDA or at FDA. We realize that institutional biosafety committees and biosafety offices already exist—pieces of this are already in place—but we want to bring more cohesion to that—organize it more systematically—and have a nationally accepted curriculum for the training received. For example, in the world that I come from, environmental sciences, there is no clear agreement on what a safety expert needs to know to make a good environmental safety assessment, but we hope that this will emerge from the discussions of the elements of the safety standards to serve as a framework for a curriculum. There are several ways in which this could unfold; for example, professionals could take a short course (two to four weeks) followed by an exam. Or graduate students in plant molecular biology might take a minor in biosafety engineering, or whatever it would be called. At our institute we have developed one new course called Biosafety Science and Policy that we hope will be taught for the first time in the 2002–2003 academic year.