(Presentation of award.)

DR. LEDERBERG: I'm very happy to have the occasion to talk to you about the emerging social contract. It's been a real privilege for me to attend this conference and to be a bystander, more generally of observing the development of the art.

As you know, I don't do forensics, but I have been following DNA very closely since the publications from Oswald Avery at the Rockwell Institute on February 1, 1944.

Every new technology offers special opportunities and challenges to the social fabric and DNA is hardly an exception, but I am pleased to note how carefully DNA forensics is being tended, acknowledging the adversarial frictions that Henry eluded to as a premier example of technology assessment and I wish that could go on so well, so effectively, and with such important scientific as well as public input, as has been the case here.

Perhaps, it's precisely the centrality of DNA forensics and legal systems that has led to this kind of oversight, but I think the net is a very positive role. The battles have been fought. It's quite clear what the outcomes are, and I think we have a lot to thank for the labors of people like Henry and other people on the panel here for having accomplished it.

But one has to say in thinking about the social contract, that's our relationships with our community and state, there are trade-offs between the very, very important values of law enforcement and other personal values.

DNA technology has the virtue of tending to support the truth, which as a scientist, I wholeheartedly support. Social acceptance of the new contracts emerging, what degree of privacy will we submit to; how much will we pay for these new systems; and all the rest; will

be very sensitive to how the technology is used in the current interval.

Reliability is, of course, the main touchstone, and this has been greatly advanced by proficiency testing and laboratory accreditation. One flawed apple could upset the cart, and we must not allow enthusiasm, demonization of alleged culprits, or sheer sloppiness to compromise this marvelous tool.

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As for the work of the DNA Advisory Board, I have to single out Bruce-Spidoli-(phonetic.) well known to most of you as the person who really did most of the work.

In a more general sphere about that contract, most of what I wanted to be said has been covered by others, but I'll just recapitulate a few cautions mentioned by many; the importance of the quality of the physical evidence and its preservation for reassessment, especially, in a case of cold hits; not to relax the quest for supporting evidence, and there's a real danger of complacency on account of the sheer technical power of the DNA tool.

If you have a hit against the database, you may really want to have an opportunity to re-check what went into the database in the first place, and if the original evidence is gone, truth will be denied that possibility, and the defendants may be unfairly treated or there may not be the possibility of an appropriate confrontation.

And I have to say that we may be at the peak of the capability and effectiveness of DNA because the counters to it are just gradually emerging.

Watch out for spoofs. We've already heard of some that outdo fictional imagination. The story of the person what while he was incarcerated in prison managed to concoct another rape with his own semen outside. Folks who do that are going to be thinking of all kinds of other ways of beating the system.

There may be a black market someday in diversionary DNA that perps might leave at a crime scene and point to high officials, perhaps, even the highest, and defense attorneys will learn how to befog the identification.

And as a couple of people said, we must strive to keep the system honest and fair, enhance poor defendants' access to objective analysis and interpretation, and with sometimes incompetent defense counsel, the court may have recourse to third parties and then to be sensitive to the fallout in criminal procedure.

We heard eloquent remarks about the utilities, and they're undeniable, about collecting profiles from every arrestee, but arrestee profiling, with all the advantages that that may offer for effective law enforcement, greatly enhances the incentive for police to make ill-founded arrests.

Will this backfire? How will courts deal with matches that are the fruit of an arrest deemed tainted? And some courts have gone very far in their zeal to curb the police power, and defense counsel are likely to rise to that occasion as well.

So the introduction of such a profound change of procedure as routine arrestee profiling really has to be accompanied with a broader view of what ripples that will generate and the precautions that need to be taken to ensure that this is done in an appropriately just and socially acceptable manner. Thank you very much.

(Applause.)