

Good afternoon.

Thank you for the singular honor of inviting me to address you this afternoon.

Congratulations, Class of 2010! Congratulations also to all those who have loved and supported you. You are amongst the most educated people in the USA and in the world. Less than 2% of the US population endures 20 or more years of formal education and worldwide the proportion is even smaller. So you are extraordinarily thoroughly (and I believe **well**) educated. And you have the debts to prove it!

Your education will equip you for a satisfying professional life. In this profession with its uniquely broad range of opportunities, I think that that is assured, and I certainly wish each of you many happy years of veterinary endeavor, whichever branch of the profession you choose to pursue.

Not only are you now amongst the most educated women and men in the world, you are members of one of the most trusted professions. That combination makes it surprising, and disappointing, that as a profession we are so often silent on matters of great importance to society upon which we are uniquely qualified to comment. What do I mean? Well, there are many examples and, not surprisingly, I will use some agricultural ones.

There are over 6 billion people in the world today. 1.2 billion of those are chronically hungry. Even in the USA, which enjoys the lowest food cost relative to disposable income of any present country in the world, or indeed any population in history, 15.2% of our population is food insecure. (Not the same thing as being chronically hungry, but a disgrace to us all the same.) By the middle of this century we will have a world population of 9 billion who will require at least 70% more food than we currently produce. We will have to do that without devoting any more land surface to its production, using any more water and without further endangering our environment. (This projection does not take into account potential diversion of crops for biofuel production.) This is a major challenge and requires a greater rate of innovation than most policy makers seem to recognize. I believe that our profession and related professions are equipped for this challenge, but the rate of technological advance is always much faster than society's ability to process it, consider it, and decide on the appropriate ethical stance in relation to adoption of new technologies. If our profession has done a bad job of anything, I think it is in participating fully in, and indeed leading to the extent that we are uniquely qualified to, the public debate on advances in biomedicine.

Take the extremely badly-handled public relations fiasco surrounding recombinant bovine somatotropin. This compound is structurally identical to the native product produced by cows. The milk produced by treated cows is indistinguishable by any means from milk produced without its use, and its safety for humans has been more thoroughly established than almost any other food product – including such staples as margarine. Consider the environmental advantages of being able to produce

15% more milk per cow, or to put it the other way around, the same amount of milk with 15% fewer cows, which means 15% less nitrogen or phosphorus runoff, 15% less land use, less water use, etc. And yet, for the most part, members of our profession tried to stay out of the debate they should have been leading.

Now I know that many of you might disagree with me. And that is good. Disagreement between educated and informed colleagues raises the level of the debate allowing it to reach a more nuanced and complicated level, where truth is more likely to reside. A better conclusion can be reached than when relatively poorly-informed participants take extreme positions based upon vested interest or ignorance and fear. We will not be able to feed a growing population without adoption of biotechnological advances. Therefore we should be active, informed participants in the debate surrounding them and their appropriate use. And at the same time it is incumbent on us to remain primary advocates for animal welfare – if we are not the spokespeople for the animals that serve us so faithfully and in so many ways, who will be?

Apart from bST, why have we been so silent on cloning and transgenesis in domestic animals? What are the implications of the recent news of Craig Venter's synthetic organism? There are many other examples where a veterinary voice is required but absent, and not all are high-tech. Where do you stand on trap, neuter and release of feral cats? What about population control of white tailed deer in Cayuga Heights, or Chicago, or Long Island, or in many other communities?

Remaining silent and avoiding public debate has worked astonishingly well for genetically modified plant products. Those of you who ate breakfast this morning probably ate genetically modified food in your cereal, or your toast. But I think this approach is irresponsible and even disgraceful. The public deserves a full and informed debate.

You may, or may not, have special knowledge of complex derivatives or naked shorting of German bonds and an opinion on how our financial industry should be structured and regulated for the common good. But as a group, you probably have a better understanding of basic and applied biology than any other profession. You owe it to society to bring this insight to bear on pressing problems that we face. Why? Partly as the reasonable belief that much is expected from those to whom much has been given. And partly because the public has a stake in your education. Although you have the debts to prove your investment in your education, the public contribution has probably been even greater.

So my message to you today is: CONGRATULATIONS, GET INVOLVED, and SPEAK UP!

Thank you. And all the very best to every one of you.