On behalf of Governor Tom Wolf, welcome to Pennsylvania and Penn State. I’m honored to participate, and appreciate the good work of the North American Biotechnology Council. Thank you, Council, Dean Roush, Dr. Gary Thompson, and the planning committee, for the invitation to address the conference. It is a privilege to be here.

I also want to acknowledge former Undersecretary Merrigan for her leadership and public service generally, and specifically on USDA’s AC21, the Advisory Committee on 21st Century Agriculture. To Committee members Lynn Clarkson and Greg Jaffe, thank you for good work and perspective. To Dr. Michael Schechtman, your leadership and skills are extraordinary. Thanks for making them available to AC21.

When I first met Governor Wolf, we discussed agriculture and the food system, and he described it as a natural resource and economic resource. I thought this was a great way to frame agriculture’s responsibilities to society and captured society’s expectations of us. I was struck by his depth of knowledge of agriculture and the influence his Peace Corps years in India, working with a small village on a new rice variety, had on his belief that agriculture can change lives and communities, and his belief in the power of science. It was this discussion and his respect for public service that convinced me to serve again as secretary. Together, I believe we can do great things.

Opportunities and Challenges
As you know, these are extraordinary times in agriculture and government—full of opportunities and challenges that require all of us to be engaged, constructive, and prepared to listen, learn, and lead. One of those issues that appear in both the opportunity and challenge column is biotechnology. “Biotechnology: Opportunity/Challenge” was actually the title of a 2003 AC21 report. With this conference’s focus on stewardship and sustainability, we encounter more words that appear in both the opportunity and challenge
columns. The many issues surrounding biotechnology certainly support the need for an AC21 to tackle some of the big agriculture biotechnology issues.

**AC 21: A Journey**

It is always difficult to know where to begin and end with any discussion about AC21 because we all make a lot of assumptions about what people know about biotechnology and the same is true for AC21, so a little background is probably helpful. I chose my words for the title tonight carefully, with emphasis on the word “journey,” understanding that the work of AC21 reaches back nearly 15 years. It is also in recognition that the current work the Committee is engaged in is built on the foundation of earlier Committee deliberations and reports. And most importantly, this emphasis is a recognition that the work on coexistence continues. It has been and will continue to be a journey, because of the evolving science and practice of agriculture.

**Key Issues**

One of the things I was struck by when joining the Committee was the structure in place to support our work. I wasn't expecting the framework, but have come to appreciate its importance for defining scope and governance. The first element of this framework is that the AC 21 Charter from USDA names multiple roles and expectations, including the development and utilization of beneficial new agricultural products, including those derived through biotechnology. Then, second, the AC21’s bylaws charge the Committee to examine the long-term impacts of biotechnology on our US food and agriculture systems and USDA. It is also to provide guidance to USDA on pressing issues, as identified by the US Secretary of Agriculture, related to the application of biotechnology in agriculture.

Agriculture Secretary Thomas Vilsack asked three questions highlighting key issues: (1) What types of compensation mechanisms, if any, would be appropriate to address economic losses by farmers in which the value of their crops is reduced by unintended presence of genetically engineered material(s)? (2) What would be necessary to implement loss compensation mechanisms? That is, what would be the eligibility standards for a loss, and what tools and triggers (e.g., tolerance, testing protocols, etc.) would be needed to verify and measure such losses and determine if claims are compensable? (3) What other actions would be appropriate to bolster or facilitate coexistence among different agricultural production systems in the United States?

So the overarching issue here is this: With the growing complexity and diversity of US agriculture, how do we enhance coexistence between different forms of agriculture production?

**Recommendations**

The 2014 Committee brought a package of recommendations to USDA for consideration:

- Educate farmers and others in the food and feed production chain about the importance of coexistence and their roles, particularly with reference to stewardship, contracting, and attention to gene flow.
• Provide farmers with tools and incentives to promote coexistence through USDA farm programs and coordination with other entities.
• Conduct research in a range of areas that are integral to understanding the current state of coexistence and gene flow management, as well the development of improved tools and practices to manage coexistence in the future.
• Provide increased assurance about the quality and diversity of US seed and germplasm resources.
• Provide a framework for the establishment of a system of compensation for actual economic losses for farmers intending to grow identity-preserved products, if the Secretary determines loss data justifies such a step.

Coexistence
Through the Committee’s process, what became clear was the issue of coexistence embodies so many fundamentals of the business of agriculture: choice, science, markets, policy, management, consumers, compromise, and change, to name just a few. But change can be difficult. Always painful, it means leaving things behind, changing habits and expectations, and experiencing stress and uncertainty. But change can also be exciting. My belief is that people will willingly put up with pain, but only if going forward is a more attractive option than staying in the same place.

So, to put AC21’s deliberations into a few of my own words, this is where we are with coexistence: Coexistence is not a new practice in agriculture, nor has it failed in recent times. Farmers have the right to make the best production choices for their farms—organic, GE crops, IP, non-GE, and new functional traits. It is important that all farmers show respect for their neighbors’ ability to make different production choices. And all participants in the development, breeding, marketing, and management of crops need to be involved in making coexistence work.

The number and scope of opportunities for differentiated products and markets have increased, and mechanisms for precisely evaluating the composition of products have become widely used in the market. The best situation is where good stewardship leads to effective coexistence. Prevention of a problem is preferable to dealing with negative consequences downstream, either on the farm or in the marketplace.

Implementing the Recommendations
USDA actions to implement the Committee recommendations are of the highest importance. Thank you to Secretary Vilsack and Dr. Schechtman for advancing the recommendations; some are in motion now, while others are planned. The AC21 Stakeholder Workshop in March was a significant step forward and confirmation the USDA is serious about finding solutions that promote coexistence. Some specific actions:
• Improve crop insurance for organic producers.
• Support the organic seed finder database.
• Continue or begin research projects, including control of corn pollen germination; crop stewardship and gene flow; and gene flow in alfalfa.
• Establish a National Genetic Resources Advisory Council.
• Develop an approach for examining trueness of type in the USDA National Plant Germplasm System.

Support for the Report
The best indicator the journey will continue are the signing statements members could submit to qualify their support for the report. Support falls into four categories:

Responsibility
GE material needs to be contained. Any solution that disproportionately places responsibility on certain stakeholders will increase conflict. All stakeholders have responsibility. Shared sacrifice—shared responsibility. Allow farmers to avoid what they don’t want and get what they do want. Tech providers—prevention-based coexistence must protect the integrity of US ag.

Regulatory
When USDA grants nonregulated status approval to GE crops, propose coexistence measures. Some suggest making stewardship practices mandatory by embedment in contracts. Contracts with farmers should include coexistence measures, much like the restrictions that protect IP, limitations of seeds for research, insect resistance management.

Germplasm
Preserve choice—seed germ plasma protection. Non-GE seed purity and supply. Issue of adventitious presence for non-GE, organic, GE. A strong ag is a diverse ag. Must support diversity.

Transparency
Set a threshold (or trigger for adventitious presence) so everyone knows the boundaries: maintain market integrity and buyer confidence.

Impacts and Implications
These include:
• Advance the conversation about how we manage the increasingly complex landscape.
• Enhance neighbor-to-neighbor relations, contact, respect, and accountability.
• Allow farmers to place their energies and resources into productive activities and help maintain positive views of American agriculture.
• Provide incentives to develop joint coexistence plans.
• Spawn creative policy discussions about how to use public and/or private investments to achieve multiple goals important to farmers and consumers.
• Help to maintain the integrity of products and confidence of consumers (domestic and global).
• Help minimize disruptions to functioning markets at home and abroad.
• Demonstrate that coexistence is a shared responsibility and a core principle of production agriculture in the 21st century.

To conclude, coexistence is about finding solutions, not differences. Agricultural production is complex and will continue to grow in complexity. We need to figure this out for the benefit of farmers and consumers. Diversity is our strength.

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