## Written Remarks by Steve Wellman, Farmer

Wellman Farms Inc.

Senate Committee on Agriculture, Nutrition and Forestry

"Agricultural Research: Perspectives on Past and Future Success for the 2018 Farm Bill."

## June 15, 2017

Chairman Roberts, Ranking Member Stabenow, and distinguished Senators of the Committee, thank you for the invitation to appear today before the Committee to discuss science and innovation which is the very essence of farming -today and especially into the future.

My name is Steve Wellman. I am a past President of the American Soybean Association and an inaugural board member of the Supporters of Agricultural Research (SoAR). Most importantly, I am a third-generation farmer from Syracuse, Nebraska farming the same fields my father and grandfather did. Today, we raise soybeans, corn, alfalfa, winter wheat and a cow-calf herd.

On behalf of SoAR and the American Soybean Association I am here today advocating for additional agricultural research support, including full funding of the Agriculture and Food Research Initiative, USDA's flagship competitive grants program.

As I like to say, we need three things to get American agriculture growing: sun, rain and research. There's not much I can do about the first two but when it comes to research I can lend my name, my time and most importantly my voice to policymakers encouraging them to renew American leadership in agricultural science.

Sufficient federal investment and wise policies are essential if the United States is to continue to be a global leader in agriculture. More aptly, as SoAR Founder Bill Danforth has remarked, "Food is too important to the human race to be a research after-thought; it needs to be a high priority for the nation's entire scientific community."

And I would add for the entire nation.

Today's hearing is a welcomed review of the state of farm science and the investment in federal agriculture research. Farmers like me are rightfully concerned about trade policy, commodity risk management, crop insurance and conservation. But the ancestry of virtually every topic discussed in the Farm Bill can be traced to research. And for that matter, the future of each rests on the shoulders of our collective ability to modernize USDA agriculture research so that we don't miss opportunities awaiting discovery.

Traditionally, we have thought of agriculture science in terms of improving yields, preventing soil erosion, and adapting crops to a variety of growing conditions. Today, agriculture stands to realize significant gains through interdisciplinary research across numerous scientific fields including data science, nanotechnology, biotechnology, biologicals and genomics. To capitalize on these relatively modern fields of science we need to ensure we have a modern federal research enterprise. That is why today I am urging Senators during this Farm Bill debate to give research and the entire USDA Research, Education and Economics mission area your full attention.

Public agricultural research spending peaked in 1994 and since has declined 20 percent. The 2008 Farm Bill authorized AFRI at \$700 million dollars annually yet today funding has reached only the halfway point of that level. As a percentage of total federal research investment, USDA has fallen to less than 3% of the annual federal investment. Put another way, research funding for federal agencies not including USDA is nearly \$60 billion dollars. Research funding at the USDA Research mission area tops out at just over \$2 billion which is an amount that has remained virtually unchanged for decades.

On our farm in eastern Nebraska thanks to modern science I plant varieties that can adapt to dry weather. Since we don't have irrigation, there isn't much I can do about long stretches of dry weather, so fortunately, I can use varieties that are drought tolerant.

With data and analytics available to purchase today, I can manage effectively and more affordably my input costs. Farmers today can receive a field script prescribing which varieties to plant, at what time on which field and more precisely measure the right type of inputs to apply to fields to maximize yields. All made possible with science.

On our farm, conservation of natural resources is a constant focus. Farming practices such as contour terraces, no till farming, cover crops and nutrient management such as grid sampling plus variable rate application of nutrients and seed are implemented. These are effective and productive practices today. Will they be in the future? Or will research demonstrate ways to improve? What we do today is based on years of research and learning. Where will the knowledge to improve U.S. production practices come from in the future without public research leading the way?

We can always use more science to improve growing season forecasts, produce hardier plants, and examine how to manage too much water or not enough.

American agriculture is a marvel of the world but that doesn't mean the world is standing by. China, Brazil and increasingly Europe are investing at a double-digit pace. Now, funding rates for agriculture research grant proposals in many EU countries are nearing 40 percent. In the U.S. those funding rates for grants that score highly have fallen from 20-25 percent to 5-10 percent. The success rate for AFRI grant applications is between 10 and 15%. How can we improve this success rate? Let's look at the numbers.

For fiscal year 2015, the most recent AFRI analysis shows that a total of 2,694 competitive grant applications, requesting \$1,793,235,471, were received and reviewed through a competitive peer review process. An additional 884 proposals were recommended for funding by review panels and could have been supported, provided an additional \$689,574,878 was available to the program.

A modernized system supported with additional investment is the plea I make to you today.

In 1945, the final year of World War II, the number of tractors overtook the number of working horses on the farm. Today, the American farmer feeds 155 other people, but for that number to continue to grow, science must remain imbedded in modern farms. To accomplish this the scientific pipeline and the research powering American agriculture must be renewed with modern programs and robust funding.

In closing, I'd leave you with a question I ask myself on the farm frequently. How certain are we, and you as policymakers, that we can provide food security for 10 billion people by the middle of this century?

The U.S. has been the world leader in agricultural production and innovation for decades. This is a role the U.S. needs to retain. It won't happen without a strong commitment to public research from Congress and our administration.

Thank you. I am pleased to answer any questions you may have.