

Jane DeMarchi
ARS NP 303 Plant Diseases Research Planning and Coordination Workshop
Stakeholder Presentation

My name is Jane DeMarchi and I am the director of government affairs for research and technology at the National Association of Wheat Growers. NAWG is a federation of 21 state wheat grower associations that works to represent the interests of wheat producers before Congress and federal agencies. Based in Washington, D.C., NAWG is grower-governed and grower-funded, and works in areas as diverse as federal farm policy, trade, environmental regulation, research and climate change. Research is very important to the wheat growers. State check-offs contribute hundreds of thousands of dollars to state-based programs. Annually, groups of growers and researchers go to the Hill to advocate for more Federal funding for wheat research. Although I was also asked to speak on issues related to grains, pasture and forage, I would clarify that these are my observations based primarily on my experiences working in small grains. I am speaking as a layman who is working to raise the profile for ARS in all of your areas of research.

Plant disease work is fundamentally important to wheat growers and stakeholders. Millions of dollars in lost revenue can be attributed to plant diseases. So, we appreciate the dedication of all of you USDA-ARS researchers who are trying to solve these issues that have significant economic impact. Many of these diseases are seemingly intractable, having the ability to mutate over time and overcome new defenses. Unfortunately, we have seen interest in production problems, such as plant diseases, fall under the shadow of newer sexier issues like bioenergy, obesity, and climate change.

For all of the work that you do, funding is critical. As part of a group of people who advocate for additional funding for ag research, I can tell you we have an uphill battle. As you all know budgets are tight. We all know that our programs have been chronically underfunded but that is not universally understood. We feel it is not right for our budgets to be further reduced while NIH's budget goes up and up. But there are people in Congress who feel that ag research is a bottomless pit of need. Every year we come back asking for more money. Furthermore, because agriculture is generally underfunded, support for research amongst our own association members can drop if other priorities are threatened. Unfortunately for you, there are very few PhD's amongst the growers, the associations and the folks that work on Capitol Hill. I recognize that it can be frustrating to work with people like me where no amount of dumbing it down seems to be enough. Lastly, in Washington, people are particularly attracted to solving new problems so at times there is pressure to repackage your work so it appeals in new ways. Perhaps we should change the names of some of these diseases so they seem fresh and exciting!

Here are some of my recommendations to ARS and NP303 researchers:

1. Understand what new models for funding and collaboration can be used in an era where additional USDA resources may not be forthcoming. What is the role you can and will play in the evolving dialogue between private technology providers and publicly funded researchers? There are opportunities for collaboration. Universities are making it a priority to tap into other sources of funding. USDA should not be left behind. Can you seek out opportunities for collaboration and funding? Can ARS help you seek them out? Are your tech transfer protocols appropriate?
2. As stakeholders, we cannot advocate for you if we do not know how your work is benefitting us collectively or individually. Ideally, we would have access to seamless information that didn't necessarily distinguish between National Programs.
 - a. The priorities outlined in your strategic plan are very much on target. However, as a stakeholder, I look very specifically at what is in it for me? That is not always readily apparent, particularly to lay people. The strategic plan needs to lay out the specific work that you will be doing **by crop** synthesized into a readable format that covers each phase from diagnosis, detection, and characterization, to engineering resistance and developing control methods.
 - b. After reviewing the wheat related NP303 projects, I know they are very focused on priority concerns for us: rusts, insects, and abiotic stress among others. However, I doubt that I would have gone online and individually printed off all of those reports if I wasn't speaking here today! And remember this is my job. **For many people you are a well kept secret.**
3. ARS and ARS researchers must do a better job communicating the impact you are having.
 - a. Each commodity group should be able to easily describe your accomplishments.
 - b. The communications must be concise and easy to understand. But my own preference is to have communications that puts successes in context. A press release on a breakthrough is great but without intimate knowledge of the research, one wonders why other work in the same area is ongoing.
 - c. Many of you may have seen press announcements recently that the wheat genome had been fully mapped by a group in the UK. It was picked up widely in the popular press. This was a great press release but unfortunately it downplayed the reality that much work was still needed.

- d. Communication is important but you shouldn't be tempted to oversell your results because that can backfire in the end.
- 4. It is not just important to work on economically significant crops and diseases. Progress needs to be made and then communicated.
 - a. I recognize the difficulty for many NP303 researchers is that you must rely on breeders and other to utilize your research and make it economically impactful. However, it is very important for all researchers to keep track of the ultimate benefit of their work and communicate it. Nobody will do this for you. I repeat that. Nobody will do this for you.
- 5. Admittedly, stakeholders are also part of the problem. Just as you have a complex array or locations, researchers and priorities, we are a collective of different groups with different regional priorities. We give you mixed messages about priorities on a regular basis. In fact, we need your help to refine our priorities and set realistic goals and timelines. Few lay people understand how long it takes to conduct your research.
- 6. A few specific comments on NP303
 - a. Farmers in production agriculture see themselves as careful stewards of the land. Without commercial champions for biocontrols, many people see them as applying to only a small subset of producers if they can be commercialized at all. Production agriculture will often shy away from programs that appear to primarily support only a small group of specialty producers.
 - b. Is monitoring for emerging diseases part of NP303? If not, it needs to be clear how USDA addresses monitoring through other programs related to NP303.

In my experience, the national initiatives to respond to Fusarium Head Blight (The US Wheat and Barley Scab Initiative) and the emerging threat of Ug99 are terrific models. These are complex diseases that need a wide range of research applied to them. Clear action plans have been developed to combat scab and Ug99 that emphasize collaboration, measurable outcomes, education and outreach and communication to stakeholders. I have been quite pleased to see the culmination of the scab work in an online forecasting tool for farmers and a scab smart website that directs farmers to resistant varieties and fungicide treatment options that are specific to their location. None of these tools (including the varieties and fungicides) were available to farmers prior to the investment in the US Wheat and Barley Scab Initiative.

I urge you to look at models for your own work that will allow you to collaborate in new ways and make a measurable impact. Then make sure everyone knows that you have done it because no one will do that for you.