

# NRSP-6 Meeting MINUTES

March 14th 2019-- Denver, CO

*Background and other related information provided 8/10/20 by Bamberg in this font.*

*We have had limited meetings in the last few years. In 2017 we had a tele-meeting based in Madison that only worked so-so, and the minutes are posted on our website. In 2018 we met at Sturgeon Bay as part of the NPGCC meeting, and minutes are posted. In 2019 we intended to meet in March at Denver, but a historic blizzard mostly disrupted that. Thus, three of the five in-person attendees at Denver were not official TAC members but joined in because they were potato scientist stranded at the conference hotel after another unrelated meeting. S. Sathuvalli, one of these was elected to take notes.*

*The main purpose of this atypical March TAC meeting was to get input from the TAC on how to respond to the NRSP Review Committee (RC) request for a FY21-25 budget proposal to close down NRSP6, i.e., “transition off of OTT funds”. Bamberg had made contacts with RC members and other influential directors who advised proposing a budget that described the genebank impact of losing the NRSP6 project funds. As a result of the Denver meeting and follow-up contacts by Bamberg, the response sent March 29<sup>th</sup> to the RC is appended to these minutes, and the RC’s reply that it was unsatisfactory. The outlook for negative impact of NRSP6 reductions is probably still realistic at this writing. Note that the final FY21-25 proposal requested status quo funding. Actually status quo would be \$135K at this writing because the RC recommended and the SAESDs passed a 10% reduction for FY20 that the TAC had proposed for the new 5-year project (see Appendix). The project proposal is posted on our website homepage. Highlights of the case for continuing NRSP6 prepared for presentations to regional association directors at their 2020 spring meetings is attached in the Appendix.*

*Also appended is the official decision of the RC for what they will recommend to the entire body of the SAESD for a vote at their meeting Sept 28, 2020.*

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In Person: John Bamberg, Walter De Jong, Max Feldman, Sagar Sathuvalli, Brian Charlton  
Remote Participation: Rich Novy, Dave Douches, Joshua Parsons, David Holm, Max Martin,  
Ronald French, A. Pantoja, JF Meullenet

Joshua Parsons (chair) Called the meeting at 9:04 am

Started with election of Secretary, discussion on election of secretary, Sagar nominated by Walter, seconded by Dave Holm

Introductions

Discussion on Funding for GeneBank by John. Regarding NRSP 6. Details presented by John. NRSP 6 is the fraction of total Genebank. Asked for alternate funding plan for Aug 15 transition of NRSP 6 Funding.

John explains that the alternate funding is not easy as Administrators are the negotiators. Suggests various schemes and there is a request for response by April 1 and leading to this Technical committee meeting and suggested a collective wisdom on how to approach for the extra money. It is a five- year budget. John informed that review committee did recommend funding for 2020 and there is no crisis in budget for FY 2020. So actually budget we are looking at is for 2021 funding. John explains that's why 150K budget was appropriate for NRSP-6.

Josh questioned about the specifics of what 150k covers and also suggested that the review committee might change for FY2021. John explained the use of 150K for core functions including, 30K (20%) - to keep up service part for use of germplasm by cooperators and suggest this is an important funding aspect of Genebank and there are lot of beneficiaries from this effort including various disease and pest screening (e.g., *dickeya* screening, Ca application, etc.. Zebra chip, Columbia root-knot nematode screening, Phytonutrient, etc). John suggests if cuts are essential then it will cutting the clonal collection and suggest cutting clonal can result in 10-12K cost. Further explained that stability of funds is essential for retaining positions and reducing money can lead to cutting positions. Genebank will have to have a major restructuring if NRSP 6 funding goes below 110K. John further suggests that a 10 % cut can be a manageable decision. A discussion related to the total funding of Genebank was discussed including the employees working at the Genebank.

A discussion on new potential options for funding was discussed including potential to obtain funding from Industry and approaching administrators/directors from potato growing states to fill in the budget including W6 and NC7.

Dave Douches informed that he discussed the budget issue with Doug Buhler, Administrator for NC7 for supporting potato genebank efforts and suggest that if any of the experiment station directors can take a lead in supporting NRSP6 budget.

John will be providing a paragraph for representations (Dave Holm and Dave Douches) to approach administrators for potential sources through regional genebanks. A discussion on applying for NIFA grants or Commodity commissions or PotatoesUSA or National Potato Council for support.

A discussion of approaching PotatoesUSA for funding was discussed by Sagar

To conclude John proposed for 10 % reduction and possibility of approaching other potential funding sources.

Josh informed the participants that the Administrative report is present in the website and ... John presented brief detail about the administrative report and suggested to look through NRSP6 website for all the details including the CGC (Crop Germplasm Committee) report.

A discussion on acquisition of PVP expired varieties by NRSP 6 was discussion and Walter suggests that it would be nice to have those PVP expired varieties especially from the industry might have a high value for the breeding programs.

John informed that he is working with Dave Spooner and Shelley Jansky on potato classification and informed that Dave Spooner will be retiring soon and a discussion on Dave Spooner's replacement was discussed. Walter informed that it is very hard to get support for a taxonomists these days and it is hard to justify for a taxonomist position and now with international restrictions on plant movement new plant expeditions are not of very useful. John also mentioned that Dave Spooner is working more on carrots lately and is wrapping all the potato work

John explained details of preservation and evaluation as a main service being done by the Genebank for effective use of germplasm and explains about germination and preservation tests.

John explained about Potato Genebank's collaboration with International Potato Center (CIP,Peru) and collaborative variety releases

Dave Douches request information on Genebank's work on "Egg Yolk" specialty potato and John explained that they are planning to release a synthetic family with longer dormancy and also probably RIL. Dave Douches questioned about the self-compatibility in these "Egg Yolk" family and John explained that it was bred in from Yoshi-6 (PI 654351) which is available for researchers. John mentioned that they are also working to get inbreds from Skagit Valley Gold. John explained about tuber freezing trait tolerance from *Solanum jamesii*, which has freezing tolerance and long dormancy. John also explained about other research aspects on Root vigor screening, water and N efficiency, tuber nematode screening. John explained about Genebank distribution and informed that there was an increased interest in use of germplasm and with special request for *Dickeya* screening. John also mentioned that the Genebank vigorously screens for PSTVD and takes pride in their efforts.

John briefly mentioned the outreach activity including teaching efforts by the Genebank and also informed about the impact statement details that can be found in the website.

Literature search Engines – staff link – publications

Josh asked about the reports from the technical representatives and a brief discussion about use of germplasm was discussed and Josh requested the technical representatives to send their reports to John by Mid – July.

Dave Douches mentioned that he sent the report to John and briefly explained that the four breeding programs in the North Central region have used germplasm briefly...

Susie Thompson using haploid extractor (IVI101) and informed that it is a Thrip Magnet

Jeff Endelman – obtained Sakai 35 (PVYchc) HH1-1 for self compatibility

Lora Shannon – Germplasm from genebank from Crossing , blight and Heat resistance CIP based, diversity analysis and is also working on Infrared spectrometry for Ploidy determination with Pepsico

Dave Douches explained that he has been accessing germplasm over decades, self compatibility germplasm is being used, . IVP 101 for dihaploids, Natalie (Dave's Student) – *S. chacoense* high leptine material for mapping for glycoalkaloids, *S. commersonii* for bacterial wilt, and additional germplasm for leaf roll and other diseases.

Walter briefly explained about the use of germplasm by North East esp. for screening for Dickeya and Cyst nematodes.

A discussion on bacterial wilt resistance from wild germplasm for use in Africa was carried out by Walter and Dave Douches.

There is no administrative report.

Ron French explained about the current status of importing plant material and informed that they got quite a bit request from Europe. Most of the request are in tissue culture testing phase. He suggested a capacity of 75 accessions per year but shooting for 90 accessions to release. For TPS it is 50 and this year they did 55. Ron also informed that they are looking into High throughput sequencing (HTS) for potential infection. A discussion on potential use of HTS for screening for various viruses. A discussion on hastening the quarantine process followed including accompanying pathogen testing record, clean-up process, space issues, personnel issues, and potential for outsourcing clean-up to private labs.

### **GMO monitoring initiative update**

John informed that Peter Bretting is spearheading the process for potatoes and a report developed will be sent. Also mentioned that the GMO monitoring needs to be in the Vulnerability report. A discussion on monitoring for genes and gene editing was discussed.

John provided an update on CGC including grants.

Dave Douches was tasked for resolutions and he quoted “John Bamberg and the NRSP 6 staff has efficiently organized excellent technical advisory committee meeting in spite of the weather complications and provided detailed thorough summary of their outstanding work in the maintenance, characterization and dissemination of potato germplasm resources for the

benefits of the scientists in the USA, Canada and around the world. This will be resolved as the genebank staff will be commended in the highest possible terms for their efficiency, adaptability and scientific contributions to the potato community”

Rich Novy was nominated for Secretary by Walter and seconded by Dave Holm. Rich Novy as elected unanimously as the Secretary. [Note that these minutes say R. Novy nominated and installed as secretary for 2020. The Annual Report for 2019 lists him as chair for 2020 as he has been serving. D. Douches would have conventionally moved up from 2019 vice chair.]

Next meeting is tentative for June 2020 at Sturgeon Bay, WI.

The meeting was adjourned at 11:57 am

# Appendix

*Below is the “Midterm Review” outlook sent to RC after TAC19 meeting discussions. In the end, none of the other prospects for support mentioned were viable. Thus, the subsequent full proposal said that in the absence of other supporters to transition to, we had to propose status quo for the new FY21-25 project.*

## **PROPOSAL FOR NRSP6 FY21-25 BUDGET -- 03 29 19**

### **Impact of lost NRSP6 funding**

A 10% cut of \$15K to \$135K can be proposed now with relatively minor impact by eliminating all supplies and travel spending, covering with soft funds from other sources, and some belt-tightening.

If we were cut by 20% without extramural compensation, we would have to fire temporary, part-time, and student “wage” employees (see FY16-20 project budget sheet). These people support the effort to water, plant, harvest, pollinate, produce custom samples and hybrids, coordinate other cooperating scientists, generate enhancing data, etc. They supply the labor needed to help researchers use the germplasm efficiently. This would make us like a pharmacy that only distributes pills without any instructions or advice. One specific consequence of a 20% cut would be that genebank staff would need to withdraw from coordinating the Potato Crop Germplasm Committee and associated evaluation grants. While this elimination of wage staff would be easiest administratively, the TAC strongly affirms that the high impact genebank service made possible by these support staff should not be sacrificed.

If we were cut by *more than* 20% without extramural compensation, NRSP6 salaried staff with core responsibilities could not be paid. The remaining staff would be reorganized, and reduction or elimination of parts of the germplasm collection would result, starting with the clonal stocks *in vitro*. Order delivery would likely be slowed.

### **Outlook for transition to compensating funding sources**

We investigated all options for compensating funds, but this proposal describes only those from which we have received positive feedback. The best approaches would involve piggy-backing onto existing programs that fund germplasm or breeding projects, and already are familiar, stable, and enjoy broad support.

For SAES contributions, the least disruptive transitioning would be accomplished by reconfiguring SAES support to increase contributions by sympathetic potato states and regions. Most logical and promising is the option of moving potato into the RPIS model by increasing the budgets of regional genebanks NC7 and W6 and transferring that to the Wisconsin site. The goal might be a total of \$30K or 20% reduction in OTT contribution to NRSP6 which would take effect when those projects enter their next project cycles, FY23 and FY22, respectively, and require only a 3% increase in their existing budgets. AAs for those projects responded positively to the idea of pursuing this.

For increasing industry contribution, PotatoesUSA funds US potato breeding programs at about \$10K per year each, and we were invited to make a proposal to include the potato genebank in that program.

For increasing federal contributions, both NCR and WR already get potato breeding special grants to which modest increases for the genebank could be made.

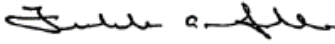
All the above have received encouraging feedback. We will follow up in order to transition to them as much as possible in the FY21-25 NRSP6 budget plan.

Below is the response of the RC to our 3/29 letter



Experiment Station  
Committee on Organization  
and Policy (ESCOP)

TO: John Bamberg

FROM: Fred Servello, Chair NRSP-RC 

DATE: June 18, 2019

RE: Mid-Term Review: Response of NRSP6 to Request from the NRSP Review Committee

CC: NRSP RC; NRSP6 Administrative Advisors – William Barker (Lead AA), Walter DeJong, J. F. Meullenet, Joyce Loper

The NRSP RC met recently and deliberated on the NRSP6 FY21-25 budget plan that you submitted to the NRSP RC on March 29, 2019. The plan that you submitted was in response to our September 19, 2018 memo in which we sought “a transition plan that identifies alternative sources of funding and the reduction or elimination of off-the-top funds.”

The plan that you provided did not meet the expectations of the NRSP RC. The first part of the plan consisted of descriptions of the impact of a 10% or 20% cut to the NRSP budget. The second part of the plan cited alternative sources of funding that might include regional off-the-top funds and a modest level of industry support. However, you did not provide a clear strategy for transitioning from off-the-top funding as the NRSP RC has sought for some time.

The NRSP RC acknowledges the budget reduction of 10% and accepts that element of the proposal. We will recommend to the ESS in September that the FY20 budget for NRSP6 will be \$135,000 and ask that you plan accordingly.

Should the NRSP6 technical team apply for renewal (the current project terminates on September 30, 2020), submission of the full proposal must include a sustainability plan that clearly describes transitioning off of NRSP off-the-top funding. While the sustainability plan has been the focus of this and previous mid-term reviews, the NRSP RC will review the entirety of the renewal to assess merit and make recommendations consistent with the *Guidelines for National Research Support Projects (NRSPs)*.

*Below is the one-page sketch of our case for maintaining state support for the genebank. This was made available on the website for our presentations to spring 2020 regional meetings.*

## **Administrative Case for NRSP6, the US Potato Genebank for FY21-25, in a nutshell**

March 9, 2020

1. In 2015 we were asked to investigate alternate funding for FY21-25, which developed into a challenge to sunset the project. We did promptly and thoroughly explore every option but found no practical substitute for the \$150K support from NRSP6. OTT is atypical for supporting a genebank, but not inappropriate.
2. Automatic renewal of the project was not expected, only a chance to present a case that accounts for all facts, history and arguments. For example, 15 years ago we saw the same initiative to drop the project. Since that was eventually recognized as a mistake and reversed, how do we rationalize following the same course now?
3. The Project Proposal on our website (<https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/bamberg-lab/>) and NIMSS fully documents the genebank's growing workload and positive impact of service to SAES scientists. The RC has told us that this is not disputed. Rather, the project's failure is to not have found a way to transition to other sources of funding.
4. But NRSP Guidelines clearly say (p. 8) that not all projects must transition off OTT. The case is strong that NRSP6 qualifies as exactly such a project. See Appendix E of the project for details.
5. Project staff are not alone in supporting renewal of NRSP6. Twelve prominent leaders in SAES, ARS, and industry potato breeders; RPIS and international germplasm managers and developers; potato farmers; and senior NIFA officials reviewed the proposal. They specifically remarked that forcing a transition to alternate funding was likely to damage the program, and unanimously recommended continuing the *status quo*.
6. In 2010, the directors mandated we show significant industry support, and we have satisfied that requirement ever since. So, Industry is already doing their part.
7. The NRSP6 budget has been flat for 25 years, and the Wisconsin host has removed substantial support over the past 10 years. So, we have already been steadily transitioning away from SAES contributions to the partnership. MRF is only about 1/5 of the budget, similar to the RPIS. NRSP6 does not cost too much.
8. ARS's share of funding the genebank has steadily increased. One might expect service to states to have declined. But no-- states continue to be full equal partners in every way. Continuing NRSP6 is a very good deal with a high ROI for states, and getting better.
9. SAES scientists will *continue to need* and get the genebank's service *that they cannot provide for themselves or get from anyone else* in FY21-25, even if their states decide to vote down NRSP6. Nobody wants to be that guy who comes to the potluck empty handed, enjoys a great meal, and leaves it to his mates to cover. More importantly, such small short-term savings undermine the broad, long-term benefits of cooperation.
10. The investigation mandated by the directors in 2015 has reached the conclusion that NRSP6 is the kind of project that fits a model of ongoing support used by the RPIS and the ARS partner, already has the most simple and appropriate mechanism, satisfies NRSP guidelines, and at a modest \$150K baseline does not put much stress on the 1% OTT budget. If that is not acceptable, let's work to improve lines of communication and start having collegial negotiation toward the best possible alternative. Of course we have no objection to reconfiguration of SAES support as an alternative to OTT, but the risk of negative unintended consequences and the cost of extra work needed to create and administer a new ad hoc multistate scheme should be considered.




*The final FY21-25 proposal is linked to the genebank homepage. Here is the RC final response.*



**Experiment Station  
Committee on Organization  
and Policy (ESCOP)**

**TO:** NRSP\_temp6 Administrative Advisors – William Barker (Lead AA), Walter De Jong, J. F. Meullenet, and Joyce Loper; NRSP\_temp6 project editor and technical lead, John Bamberg

**FROM:** Doug Buhler, Chair NRSP RC 

**DATE:** June 18, 2020

**RE:** Response to NRSP6's Request for Renewal

**CC:** NRSP RC, Regional EDs

The NRSP RC (National Research Support Project Review Committee) met via Zoom on Wednesday, May 27, 2020, to evaluate NRSP\_temp6, the renewal proposal for NRSP6. The committee reviewed the project proposal and 5-year budget submitted to NIMSS, peer reviews supplied with the proposal, responses to the peer reviews, and the reviews of the regional associations.

The NRSP RC discussed the proposal at length and was in agreement that the US Potato Gene Bank, which NRSP6 supports, is of great value. However, despite repeated requests by the NRSP RC for NRSP6 to transition to a new funding model over many renewal cycles, the current NRSP\_temp6 proposal concluded that no viable alternative funding models exist.

No other ARS programs with a single commodity are supported by the NRSP mechanism as off-the-top Experiment Station funds and all other gene repositories are supported by industry, such as the National Clonal Germplasm Repository for Citrus, as an example. Moreover, language in the Agriculture Improvement Act of 2018 (the 2018 Farm Bill) included a charge to USDA-ARS to develop a strategic plan for sustainability of the National Plant Germplasm System (NPGS). As such, the NRSP RC concluded that the responsibility of funding NRSP6's efforts ultimately lies with ARS, not the Experiment Station Section (ESS).

Therefore, the NRSP RC unanimously recommends denial of the renewal proposal and budget for NRSP6, as submitted. If this recommendation is approved by the full Experiment Station Section during the Fall ESS business meeting NRSP vote, NRSP6 will receive one final year of off-the-top NRSP funds at the current FY2020 level of \$135,000, per our current NRSP Guidelines. Accordingly, NRSP6 will expire on September 30, 2021.

While the NRSP RC does not support continuation of the current project, we do see the value of continuing a relationship between ESS and the US Potato Gene Bank. We hope that discussion will continue at the appropriate levels of USDA-ARS, ESS, and the University of Wisconsin as the host institution.