**Executive Summary**

As the most consumed and most valuable US vegetable, potato substantially influences the farm economy and environment in many states. High value-added processing and high and regular consumption gives potato significant impact in all states with respect to the food economy and citizens’ health. For these reasons, and because potato has more useful exotic germplasm than any other crop, there is much activity in federal and state breeding and research programs. NRSP6 is the only program in the nation responsible for providing potato genebank services. NRSP6 is the premier potato genebank in the world. This document details robust accomplishments over the past 5 years despite eroding inputs. Requests for NRSP6 germplasm were strong and were promptly filled. We not only preserved the materials, but conducted R&D that showed ways to make genebank techniques more efficient. We also discovered and characterized novel mutants/traits that will help users better exploit potato germplasm. We propose that the new project will place an increased emphasis on consumer-oriented traits, particularly nutritional ones. With some estimating that 1/3 of GDP will be spent on healthcare in the future, there is hardly a more important problem before society, and there are many unexplored opportunities for use of NRSP6 germplasm to address it. Recent restrictions on international germplasm collecting and sharing make what we already have at NRSP6 even more precious. While NRSPs are to transition to other funding sources, inputs from other partners have declined. Thus, we are asking for continuation of $150K per year in MRF funding. This proposed continuation of longstanding flat MRF funding represents a loss of buying power that will necessitate further streamlining/reduction of staff and germplasm evaluation projects and more efficient management unless we can backfill with grants. Virtually all crop germplasm in the National Plant Germplasm System is genebanked in partnership with SAES. We believe that NRSP6 is a particularly good investment for MRF. It leverages about an 8-fold contribution of ARS, APHIS, UW and grant dollars by partner programs. NRSP6 gives SAES ownership of a renowned genebank for one of the nation’s main food crops.