July 29, 2021

To: NRSP Review Committee of ESCOP

From: Dr. Brenda Murdoch current Chair of NRSP-8 Dr. Jack Dekkers incoming Chair of NRSP-8

Cc: NRSP8 Administrative Advisors – Archie Clutter, John Kirby, Steve Lommel, Noelle Cockett

Subject: NRSP8 Transition plan

The NRSP8 community appreciates the feedback it received on June 18, 2021, from the NRSP RC on the NRSP8 Midterm Report and acknowledges that our 2-pager submitted to the committee did not include an explicit plan for transitioning off current NRSP funds. Below, we focus on several ongoing initiatives in which NRSP8 is involved to secure continued funding from other sources in order to sustain critical activities/functions of NRSP8:

- Bioinformatics/Biocuration: The NRSP8 community hosted a workshop at the January 2020 Plant and Animal Genome (PAG) conference that engaged the director, associate director, and key national program leaders from USDA/NIFA, as well as leadership from the ARS National Ag Library, in a dialogue around how to sustain the critical role of NRSP8 in bioinformatics and biocuration of data associated with livestock and aquaculture species genomes. The group began a discussion of programs for other commodity species (e.g., TCAP and WheatCAP) that leverage coordination and partnerships across USDA NIFA/ARS and growers/industry to provide funding and infrastructure capacity for critical functions, and that may provide a model for sustaining these functions related to animal genomes. The PAG conference was not held in 2021 due to the pandemic but NRSP8 will hold a second workshop at PAG in January 2022, that will again include leaders from USDA NIFA/ARS and will be expanded to included representatives of the animal industries, at which strategy details will be developed. In addition, NRSP8 leaders representing bioinformatics (Reecy, Koltes) continue to work with university federal relations teams to build and execute a strategy for federal appropriations for a sustained biocuration effort for animal genomics data and associated cyberinfrastructure. This request is currently with Federal Delegates.
- Enabling research into the genetic architecture of economic traits for livestock: The NRSP8 community is an integral partner of the Agricultural Genome to Phenome Initiative (AG2PI) (NRSP8 representatives Murdoch, Dekkers, and Tuggle are co-PI's). Funded by USDA-NIFA, the overall objective of AG2PI is to assemble and prepare a transdisciplinary community to conduct AG2P research and to develop white papers for USDA and the Federal Government on the need for such research. This initiative transcends crops and livestock, including aquaculture. For additional details and activities, please see https://www.ag2pi.org/. The NRSP8 engagement and leadership in AG2PI is another key mechanism for building funding strategies across agricultural genomics, and informing USDA and other federal funding programs that can help sustain critical NRSP8 functions.
- Community Workshops: The wide variety of NRSP8 technical and coordination workshops that have been held annually at the PAG conference have been an important factor in the success of NRSP8 and are important for the continued integration of animal genomics research across institutions and with industry. Attendance and participation in these workshops also contribute significantly to the professional development of young scientists and students in the field. Discussions on opportunities for sustained funding for these activities will be an additional agenda item for the strategy workshop planned for the 2022 PAG conference to include USDA NIFA/ARS leadership and industry representatives.