





## Invitation to participate in an AASV-Foundation Funded Project – Assessing Senecavirus A shedding and transmission in growing pig populations Guilherme Preis, Cesar A Corzo University of Minnesota

The frequency of Senecavirus A (SVA) outbreaks usually peaks between the months of August and October. It seems that this frequency has been increasing since May of 2021, so it is imperative that we keep our eyes out for new outbreaks in the following months. This vesicular disease has been responsible for an extreme increase in the number of foreign animal disease (FAD) investigations performed by the USDA in the past years (Figure 1).

Figure 1: Number of foreign animal disease (FAD) investigations due to swine vesicular diseases and FADs from other species in the United States.



Previous research from the University of Minnesota Swine Group, funded by the American Association of Swine Veterinarians (AASV) Foundation, showed that SVA-infected breeding herds yield SVA RT-PCR positive processing fluids for up to 21 weeks after initial virus detection. However, there is no data on whether these piglets will serve as SVA carriers into the growing pig site and lead to further transmission. Considering that many SVA outbreaks occur following stressful events such as transportation and farrowing, it is crucial to better understand the epidemiology of this disease in the growing pig population. Therefore, the goal of the proposed study is to use molecular diagnostics (i.e., RT-PCR) to assess shedding and infection in pigs during different stages of the nursery-finishing phases, using a strategic blood and consecutive oral fluid sampling strategy.

We are currently seeking a production system that would like to enroll in this study. Specifically, we are seeking one sow farm with an ongoing SVA outbreak. The sampling protocol includes collecting processing fluids from five cohorts of piglets, which will later be followed over time in the nursery-finish stages of production. Samples to be collected in each cohort of weaned piglets are a one-time-only blood collection and consecutive oral fluids collection in different weeks. Testing and shipping costs will be covered by the AASV-Foundation grant and data generated from this project will be shared with you as results become available.

If you detect SVA signs in your breeding herd and are interested in understanding how SVA is circulating in your downstream production flow, please email us! We can work together with you and help the industry control this endemic vesicular disease.

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