Objective: To examine the differences in Se tissue contents from pigs fed grains from various regions of the U.S. (collaboration with NCR-42 and S-145)

It has been brought to my attention that there is a scarcity of information about the normal concentration of Se in various tissues of the grower-finisher pig at normal slaughter weights. Ku et al. (Michigan State) did a study in 1972 (prior to the approval of Se for livestock) and found a high correlation of dietary Se to loin Se concentration (r = .90). Today the fortification level of Se has obviously changed with most diets now adding sodium selenite to swine diets at a level not to exceed a supplemental level of 0.30 ppm Se. I think it would be of interest to do a study involving today’s pigs and current diets with what is being fed today on various tissue Se concentrations. I fully understand that most are now adding selenite to all swine diets regardless of the indigenous level in the feed. I think that the determination of the tissue Se under conditions of today is important to re establish the Se concentration in the tissues of pigs.

For states interested in cooperating in a “small trial” and have the time, send a sample of the following tissue from 3-4 normal market weight pig (provide live weight at the time tissue was collected) fed diets largely originating from your region of the U.S. You do not need to feed a group of pigs, but rather collect the tissue from your herd that you are planning to slaughter soon (within the next 2-8 weeks), and where you know the history of the pig and diets fed. Please send me the wet tissue (dry ice and overnight if possible) or chilled (24-48 hr is fine). If you are not interested in cooperating in this experiment would you pass this request to someone in your department and see if they might be interested in participating. The following is what I would like to receive.

1. Pig weights (slaughter)
2. Loin (~100 g)
3. Liver (~100 g)
4. Heart (half longitudinally cut)
5. Hair sample along topline (~5 gram)
6. Diet samples (both sample of grower and finisher) If you know the supplemental selenite fortification level please send me that information.

Please provide the formula of the diet (so that I can if it is corn or barley based, etc.). Would you also send me the dietary vitamin E level that is fortified in the diets during the G-F period. I would prefer that the pigs had been fed a cereal grain, soybean meal type diet (without animal protein during the grower finisher period).