

## Joe Jurgielewicz and Son LTD

1. My name is Dr. Zachary Lowman, I am the Cooperate Director of Research and Genetics for Joe Jurgielewicz and Son Ltd (JJS). Joe Jurgielewicz & Son Ltd. is a 4<sup>th</sup> generation family-owned duck farm that specializes in bringing the finest ducks to restaurants, institutions, retailers and home consumers across the U.S. and globally. JJS corporate headquarters is based in Hamburg Pennsylvania, and has 2 subsidiary companies in Indiana and another in Canada, near Montreal.
2. One of the main issues that I am faced with is Duck specific Research. We privately fund virtually all or our own duck research. There is an abundance of Chicken and Turkey research from numerous sources on virtually all topics, and some basic research from 20+ years ago when the Cornell Duck Lab was very active. Some principals and research are applicable to commercial Duck production, but even the duck specific data that is available is not applicable due to the advances we have made genetically ie. We have cut the growing period down by almost 20 days, so even nutritionally, the duck data is not valid. Furthermore, the development of some basic genomic tools, such as the identification of SNP and the development of SNP chips are necessary before any genomic selection can be applied in the duck.
3. Our biggest industry challenges that could be influenced by selection for certain traits would be:
  1. Nutrition (how efficiently birds utilized certain nutrients/minerals ie. nutritional conditioning)
  2. Welfare (ie. development of molecular tests for Ascites or Leg problems from increased growth)

The selections we are currently doing are very basic, but I think approaching these through molecular methods would be of great benefit, yet we lack funding.
4. I feel there could be some overlap or beneficial joint research on numerous topics, genetically I don't know if there could be a lot of overlap. But I feel most of it would be on topics such as AI resistance, or diseases in general. Ducks have a very unique immune system, and are not affected by many diseases chickens are. In light of all of the recent AI outbreaks and monitoring, there should be able to be more "joint" research or education between all poultry species. Duck are notorious for being "AI factories" but in reality, we test all of our flocks just as frequently as chicken and turkey producers. Since ducks are "resistant" to many diseases, I feel they could play some role in serving as a standard or control for such projects.