**Model Part**

We all agree with that model is an important part in daily work of a statistician. Thus, we prepared several questions about model for the interview. The questions and corresponding answers are as follow. (FQ means follow-up question)

1. Q: Which part do you think is the most complex or most time-consuming in your models? (Proposed by Xiang Li)

A: I would bring in three challenges that I once met. The first one is random effects and modeling correlation. Data that comes from populations automatically brings random effects and cooperating information from patent tests requires to model correlation. This challenge can be solved by mixed model. In addition, there are kinds of responses in our models, such as dummy variables, counting variables and category. Finally, we have to be fast and let the solution as robust as possible, which causes us hardly to trade off simple and elaborate models.

1.1 FQ: Could you give more examples in mixed models? (Proposed by Jinrui Du)

A: Because the data is actually connected by pedigree, so pedigree information is important in the moment of analyzing the data. That all comes quite naturally in mixed model framework.

2. Q: Usually, statistical models can be used to predict future data, classify target objects, find effective factors and etc. So, what is the main purpose of statistical model in your research? (Proposed by Xiang Li)

A: The main purpose is prediction and prediction with small data. Predicting which material or plant hybrid can be a commercially potential product helps us narrow down the number of experiments to a small amount and save time.

2.1 FQ: What do you mean by small data? (Proposed by Jinrui Du)

A: Small data means the number of experiments you can run is small. Because time is limited and we cannot spend 10 years on trailing material to get results.