**Interview Summary**

Based on the experience of Dr. Marco, we organize our interview questions in four parts, which are working experience, data, model and academia vs industry. The questions and answers in each part are as follow. (FQ means follow-up question)

In the first part, we asked some questions about Dr. Marco’s working experience.

1. Q: what do you do in each phase to achieve goals and what does a typical day look like for researcher and how do you divide your tasks? (Proposed by Song, Jia)

A: The work of a researcher involves a significant focus on communication, both with people using data analytics and within his team. The key aspects of his role include explaining how to use data analytics, ensuring efficient deployment of analyses, and dedicating time to scout for potential improvements and innovations. Internal decision-making processes and team management, including keeping team members motivated and ensuring their professional growth, are also crucial elements of responsibilities. Overall, researchers’ role requires a balance between maintaining current operations and actively seeking opportunities for enhancement and innovation.

2. Q: could you share an instant where statistical finding positively impacts people's life? (Proposed by Song, Jia)

A: There are lots of examples such that Hybrids are tested in an efficient way and how to allocate treatments in a a layout in efficient layout can bring to to efficiencies. The goal is to reduce the need for extensive replications based on insights gained from data analysis.

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.

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

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.

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

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.

4. Q: What is the main purpose of models in your work? (Proposed by Li, Xiang)

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.

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

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.

In the last part of the interview, we were interested in knowing the professor's point of view on differences between academia and industry.

5. Q: Based on your experience, were there any noticeable differences between both? (Proposed by Kanbar, Mikdad)

A: I already had experience on the applied side of statistics in academia. This means there was not a lot of change. On the other hand, there was indeed a slight difference with respect to priorities and developments.

5.1 FQ: In the academia, I would imagine you would explain things to other researchers. Was it more challenging to communicate with others in the industry? (Proposed by Kanbar, Mikdad)

A: That is true! One of the challenges in the industry is to communicate with others. In the academia, you should explain with more details, this is different from explaining things to end-users. Yet, the communication is still there!

5.2 FQ: Will you use visualization techniques as an essential part of explaining ideas to other people? (Proposed by Kanbar, Mikdad)

A: Yes, we as statisticians do not necessarily have all the skills to do developments, that's why we need to work with other people who have the right skills to build efficient, attractive and user-friendly dashboards.

6. Q: What would be your advice to us, as students of master statistics and data science? (Proposed by Kanbar, Mikdad)

A: The most important thing is to like the area and enjoy what you are doing. Moreover, you should understand the context.