

Interview Records of Mr. Wu Guangen

1. Research methods

This study adopts the interview research method of social survey method, and adopts in-depth interview and non-frame questioning. The researcher designed relevant questions for the research topic. During the interview, the interviewees were asked to state their answers and express their opinions on this question within a limited time. After the interview, the researchers summarized and refined the answers of the interviewees, and completed the writing of interview records with the interviewees' review and approval.

2. Respondents

The researcher invited Mr. Wu Guangen from the school of medicine of Sun Yat-sen university for an interview. Mr. Wu Guangen is currently engaged in research on oncology. However, in the past study, he had sufficient knowledge and research experience on microbial fermentation. The team thinks that although Mr. Wu Guangen has little connection with the application field of the product developed by this project, he has the ability to understand this project quickly. His opinions may provide us with the possibility of the application of this project in other fields.

3. Interview records

According to the project team's evaluation of the respondents, the project team took seeking "recognition" as the core objective of this interview and formulated the following questions. In order to obtain the required complete information, the researcher provided the interviewee with some information and documents about the project in advance. During the interview, the researcher would use the keywords in the introduction of question design in the following text and "could you please give an example?" And other words to prompt.

3.1 Would you please briefly introduce your field of work?

Wu: Now my main research direction is oncology medicine. It is mainly about the study of tumor diagnosis and treatment. There have been no revolutionary advances in the prevention, diagnosis and treatment of cancer, and there are far more uncharted territory and problems to be solved than the knowledge we have gained and the problems we have solved. Therefore, the study of cancer is extremely challenging and difficult, and there is a huge space for development and success opportunities.

3.2 This project applies the database construction technology of synthetic biology to provide a metabolic optimization method of flow control for actual fermentation production. Do you think this project has a certain application space in the field of tumor medicine?

Wu: in terms of the idea of the project, I think there is considerable room for application. In the process of screening tumor markers, we have found that the expression levels of various tumor markers are different. For example, tumor cells may have both tumor markers A and B, so the expression levels of A and B are different. If the idea of database building can be used to screen out targeted drugs with better effects for different expression levels, the application prospect will be quite great.

3.3 How do you think the project team should be adjusted before it can be applied to the field of tumor medicine?

Wu: I think one of the core problems is that the Toehold Switch that you currently use can only be used in prokaryotes. So if you're going to apply your tools to a broader field, like oncology, it's going to be critical to find a regulatory element that can be used in eukaryotes with excellent performance.