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2022 SPARK Biomedical Innovation and Entrepreneurship Training Course

Report

I would like to thank T-CReDO for the opportunity to join SPARK Oceania and SPARK Taiwan, 2022 Biomedical Innovation and Entrepreneurship Training Course. I thoroughly enjoyed an intense 2 weeks of lectures, coaching, and pitches. This course helps us to develop our creative way of thinking in biotechnology projects. As future scientists, sometimes we do not realize how to create biotechnology innovation in the first place such as being aware of current and future bio business, establishing and managing biotech companies, and protecting the invention by filing an intellectual property. Therefore, this course which was collaborated with many experts in this field enlightened us on how to properly become innovative in biotechnology.

Firstly, we learned about introduction to biotechnology business, strategy to commercialize successful projects, design thinking, protection of a new invention, and making a project work plan and milestone. Then we make an initial pitch about the interesting project with a team from interdisciplinarity. Continue with lectures about clinical studies, repurposing drugs, medical device development, and Technology Readiness Levels (TRL). On the entrepreneurial side, we learned about how to finance our idea and get inspiration from the successful journey of SPARK founders and scientists. Interestingly, one inconvenient truth of biotech is only one out of ten drug candidates that continue tests as FDA-approved therapy. Thus, to increase the success rate we have to be more creative even in our early careers as a scientist, join

the system that develops new ideas which support us financially, and think outside of the box in a pragmatic way.

At the finale of this program, we have a fascinating pitch and watch fellow pitches. My team designed a new AI technology to simply diagnose one of the rapidly spread diseases: sexually transmitted infections (STI). The other teams also have attractive ideas to solve unmet medical needs, for example cardiovascular, rare, and lifestyle diseases. We also used to develop critical thinking in this course by discussing, asking a question, explaining to fellows and instructors, or accepting criticism and suggestions. Therefore, through this SPARK opportunity, my perspective has globally developed and I will try my best to contribute as a productive scientist. In addition, since the University of Tsukuba is one of the best global universities in Japan, if necessary, I am excited to share this experience internally and globally.