

出張報告書

令和元年 10 月 02 日

医学医療系 脳神経外科
助教

ザボロノク アレクサンドル

次のとおり報告します。

期間：令和元年 08 月 24 日－09 月 07 日

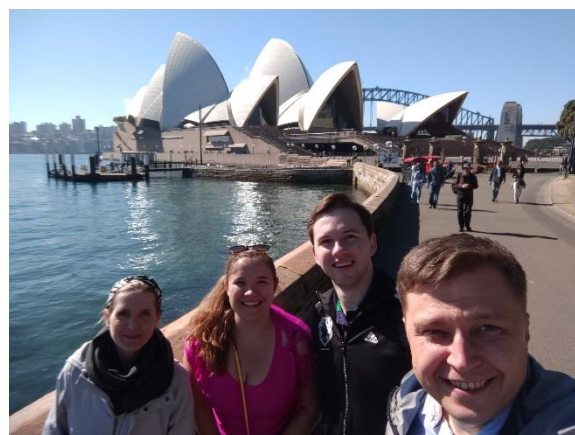
出張目的：2019 7th Annual Training Course in Biomedical Innovation and Entrepreneurship に参加

出張先：University of Technology Sydney, Sydney, Australia

業務内容：During two weeks I participated in the Training Course in Biomedical Innovation and Entrepreneurship organized by the SPARK Global and the University of Technology Sydney.

The main goal of the course was to train the participants to develop skills in design thinking, brainstorming, development and commercialization of products for unmet medical need. The course was also aimed to change us in the way that we can become more creative and innovative in translational research in biomedical sciences. The course was held in the way of attending lectures, seminars, group work and making presentations, with the final pitch at the last day of the course.

To begin with, I came to Australia in the morning on August 24th and checked in at the designated hotel, that was located very close to the central station and the city center. As three other students also arrived early, we had a good opportunity to walk around and check locations of necessary facilities. We were glad to visit the central park and see the harbor and the Opera House, which is quite famous all over the world.



Next day in the morning all the student gathered in the lobby and had a walk to the University of Technology buildings to check the rooms for seminars, followed by a useful walk around the city guided by professor Michael Wallach. Later that day we all were invited to the welcome dinner in the northern part of Sydney and had a great time socializing with other students and course organizers.

On the next day, our seminars and lectures began. The initial seminar was devoted to absolute brainstorming, practicing in creating milestones for a trial project all together. Later we were divided in groups of three – four people and had to find a solution for a well-known disease that is really difficult to treat. After the

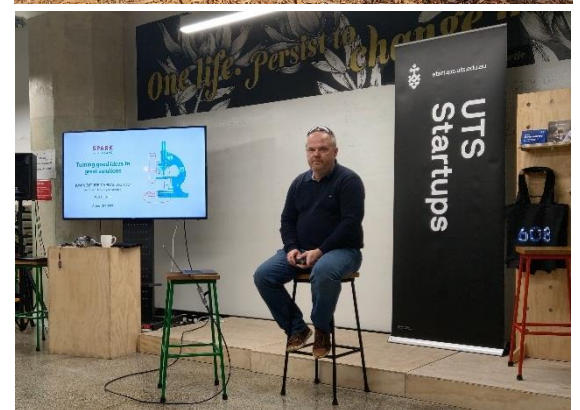


initial training, we had to search for a medical problem, that haven't got a solution yet, develop and protect our own project. There were four people in our group, and we had to work together till the end of the program. Group-work was not always easy, and we had a lot of discussions and arguments about our project. The first difficulty was related to the problem itself, and it took several days to find, discuss and agree up on the problem, which is really essential and has no perfect solution in the modern medical care.

On the weekend, the excursion to the wildlife park and the Blue Mountains was organized for our big group. We had an opportunity to get acquainted with Australian nature in the wild park, see different animals and pet and feed wallabies, that was really amazing. In the end of the day, we were brought to the big boat and sailed along the river to the central part of Sydney with a night view on the city, which was really fascinating.

The next week, day after day along with lectures, we worked on our projects as a team with great help of the advisers and assistants that had experience in creating such projects. We had lectures and seminars, that helped us understand how biotechnology projects and related companies are established and managed, how we need to advertise the products and search for funding. It helped us understand that we needed to develop creative and innovative skills of entrepreneurs to make our projects to come to life. Therefore, we had to get a real-life experience of our own project development and to learn how to protect our intellectual property.

A number of lectures on design thinking and its importance in brainstorming and creating new ideas, intellectual property management and ways to protect our new inventions, milestones of product development, development of medical devices, and how venture capital works were given by course organizers and invited lecturers. Additionally, actual life stories of researchers who developed their own products were given as examples, and were of great help. We learned business planning and creating a



startup model, as well as drug development process and licensing, we also learned about clinical trials and related regulatory authorities.

Our group of four students worked on the project to treat middle-of-the-night insomnia. We created the design of a medical device, the interactive earphones that were able to help people to fall asleep during the night. We worked polishing our project every day, and we found real experts to consult with. We also separated our work as a team, assigning tasks for each participant and then gathering the results and discussing what we could do better to create a perfect product.

Last several days were devoted to presenting our projects, listening all the criticism from our advisors and assistants, and polishing the final pitch, that had to be presented at the last day of the course in a form of a competitive talk by all the members of the group. One of the members of our group left earlier due to the conference, so there were finally three of us presenting the project.

Before the final pitch we also had a reception at the Parliament House with a number of important and powerful people participating. We could get acquainted with other global participants of the SPARK program and had a nice time in a very formal atmosphere.

On the last day, all the groups presented their projects and the winners with the best presentation were selected by the experts. Though the projects were for training only, such a brainstorming teamwork and the feeling of creating a real piece of biomedical innovation formed an atmosphere of global necessity of our work there and undoubtful importance of the program itself, giving a life-changing experience in search for an unsolved medical problem and creating original and innovative solution for it.

I would like to thank Professor Yoshihiro Arakawa, Dr. Tomoyoshi Koyanagi, Dr. Takeshi Machino, Ms. Satomi Moriyamathe, and the whole T-CREDO team of the University of Tsukuba for their support and for giving me such a wonderful opportunity to participate in the life-changing course, and I also would like to thank organizers of the course, the coordinator Professor Michael Wallach from the University of Technology Sydney, co-directors of SPARK Stanford, Professor Daria Mochly-Rosen and Professor Kevin Grimes, and the director of SPARK Finland Pasi Sorvisto, for creating such a unique course, its coordination, and for giving us valuable knowledge, changing our way of thinking and our attitude towards biomedical entrepreneurship, and also I would like to thank Isabella Hajduk, Kate Samardzic, and other assistants for their help and practical advices during the course, and, of course, all other lecturers, that filled our minds with valuable information and inspired us to change our future.

