REPORT about 2018 Gordon Research Conference on Proteoglycans

It is my great honor to be funded by the International Society for Matrix Biology (ISMB) to participate in this 2018 GRC proteoglycans conference. I am impressed by the conference because the organization committee included so many fields related to proteoglycan research, such as the fields of infectious diseases, inflammatory diseases, and fibrosis.

The conference emphasized sharing of unpublished data by the speakers. Therefore, I learned a lot about novel fields of proteoglycan studies, such as cell surface hyaluronidase, TMEM2. There were also discussions about novel technics and tools to analyze the tissue samples, although there was still a gap to go for the analysis of the human plasma or serum. In the poster sessions, I appreciated to have the chance to discuss the details of experiments with researchers who are working in close fields and perform similar experiments as I do. For me, an important part of this conference was that I participated in some discussions about the roles of proteoglycan molecules and pathway modulations. It is thought-provoking that we can learn much from addressing a question from different perspectives.

As an inexperienced participant, throughout this conference, around the dining tables, walking aside the lake, on the football game court, and even in the living room of our accommodation, I was relishing the talks with senior investigators. We had discussed about scientific issues, practical problems, and even their opinions and experiences based on their careers. This will be great advantage for me to go further in my own career.

Out of these kinds of feedback during this conference, I generated several ideas which will be crucial in my future research. First of all, to elucidate the role of hyaluronan on macrophages surface during the process of flaviviral entrance and infection. It would be valuable to find out what kind of effects over-produced hyaluronan has on the susceptible macrophages and other immune cells. A second idea is to perform the systemic biology analyses with plasma samples from those patients with different kinds of infectious diseases. A third idea is to elucidate the role of different kinds of hyaluronan binding proteins, such as neurocan, among infectious diseases.

As a clinician-backgrounded PhD student, I believe that the translation of proteoglycan research into clinical implications (such as discoveries of diagnostic biomarkers, and therapeutics molecules and materials innovations) is very important. Therefore, this conference perfectly fitted with my research interests. Finally, I would like to thank the committee of ISMB again for supporting me to participate this excellent and meaningful conference.