

The report after visiting MIT

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While our stay in Boston, we have visited two labs in MIT. The lab member kindly gave us the introduction of their research, and also talk about their everyday-life in MIT. It was very informative and stimulative experience that we cannot receive in Japan. In this report, I would like to write down the many kinds of differences between U.S. and Japan that I noticed during my stay in Boston.

First, I was surprised at the scale of the campus itself. The campus was constructed by many beautiful designed buildings, such as a well known “Stata center” designed by famous american architect F. O. Gehry. Also, the campus itself harmonizes with the townscape, with a plenty of beautiful nature. I think Katsura campus is also well-designed, but the scale of each building cannot be realized in Japan, a country that is small in square footage. The building of department of chemical engineering, where we have visited, is located near the Stata center.

Inside the building, it is also beautifully designed. The wall of the corridor was filled with information for students and postdocs, and it also contains many notification of research seminars. I think this is one of the reasons that most of american (and european) students do not hesitate to discuss with others, not like in Japanese students. In addition, it is important to absorb knowledge from other researchers, especially the researchers who have different interest and technical field from oneself. The students in MIT has many opportunity to do this, which makes me envious of them.

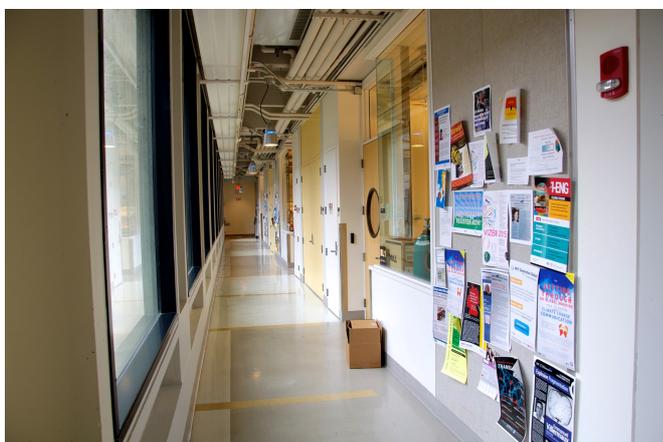
Laboratory itself is also much more clean and tidy compared to that of average Japanese labs. The layout is also well thought-out, and despite many equipments, there are plenty of space for movement. What surprised me the most is that their equipments are similar, or even in some cases, inferior to ours. I again realized that our research environment in Kyoto university is one of the most advanced the in the world, and we should grateful for the good fortune of being able to work in such a good environment.



Well known “Stata center” designed by Frank O. Gehry.



Entrance of the building for chemical engineering.



Clean and tidy corridor filled with a plenty of information for students.

The detail of the research is little different from my speciality, but still some of the research interests me very much. If I had a chance to visit MIT again, I would like to visit electrochemical energy lab. In Prof. Jensen’s lab, most of researches are collaborative research with companies, such as Novartis and Corning. It may be due to the contents of their research, and it was very fresh to me. Also the staff composition is very different from Japan, there are more than 10 postdocs and very few undergraduate students. One of the postdoc member told us that after graduate the doctoral course, they have to be at

least 2 or 3 years of postdocs to become an assistant professor. After getting job as an assistant professor, they can have their own research group. Although this is very attractive, but this means that they have to get enough budget for their labs to acquire talented players for keep the quality of researches. If they wish to continue their work in the university for more than decades, you should pass the evaluation of your research results by the university. Failing in this evaluation simply means that they are going to be fired. This is very competitive system, but works well in the U. S. Therefore, many postdocs polish their work wishing to have their own research group someday, and the result of this, many interesting achievement have been reported from this country.

As same as the U.S., MIT is also a great melting pot of races. I think this clearly shows the research in the MIT have an attraction for researchers all over the world. In my laboratory, there are only four overseas students who cannot speak Japanese. Actually, there are also three Chinese students in our lab, but they have started living in Japan from their high school ages, so in this case, I do not number them. Because Japan is not an english-speaking county, it is difficult to choose Japan for the country to study abroad. However, we should re-consider this present condition to keep our quality and superiority in scientific research while the decrement of number of Japanese students.

This three days of short trip to Boston was a precious experience for me. It was brought home to me how important to study abroad, not just for improve my research but also feel the differences in the education and research environment. It is hoped that our future research activities will not stop in Japan, but will also have to include activities that bring the world's universities and researchers into view. We can study english in Japan, or perhaps we can complete our research only using the equipment in Japan. And this seems to be enough and there are no room for study abroad. However, as long as we stick to staying in Japan, we never feel this differences in approach to their research and also we cannot understand foreign researcher's way of thinking. This trip helped my desire to study in abroad getting much stronger.

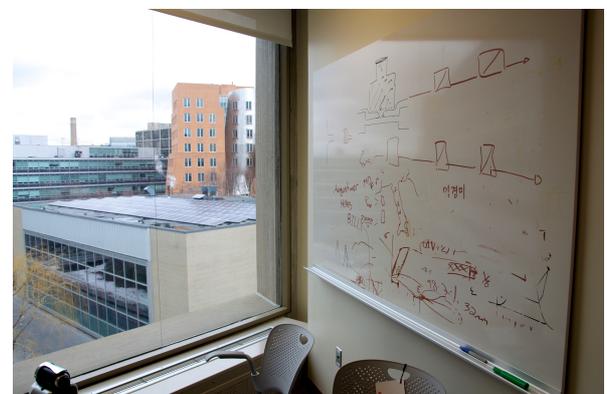
Finally, thank you for giving me the opportunity to stay in the MIT.



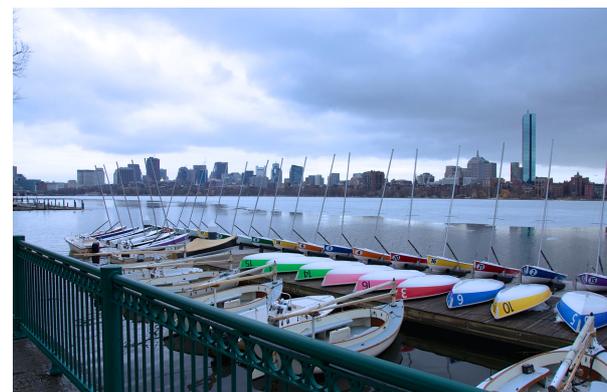
VERY clean and tidy laboratory. Well equipped and the layout is well thought-out.



Students listening to his explanation of the experimental equipment.



The view from Prof. Jensen's lab.



Beautiful scenery in Boston.