ヒューマンウェアインターンシップ報告書

インターンシップ体験記(言語は日英いずれでも可)

I participated in a half a year internship at NASA Ames Research Center in USA (Figure 1). The time fries but certainly I came back with numerous invaluable experiences that will become assets in life. Not only the research I engaged in, the main part of this internship, but many other things have broadened my mind, waken up my ambition, and made me grow as a person.

The core of the internship is research. Mainly, I developed a project with Mark Ditzler (on the right in Figure 2) and Andrew Pohorille (on the left) who kindly accepted to become my local supervisors. The research topic is astrobiology, which is the study to unfold how the life originated and has evolved, find an extraterrestrial life in other planets, and terraform other planets so that humankind can survive in the universe in the far future. In particular, I focused on the 1st subject, the origin of life and early evolution. Briefly, some specific RNA (ribonucleic acid) is considered to have occupied the center stage on the early earth. Such RNA catalyzes chemical reactions and is referred to as ribozyme (ribonucleic acid enzyme). Based on this leading hypothesis, I tried to construct a method to obtain the shortest (simplest, easiest to construct by nature) ribozyme to examine what the minimal ribozyme is and how rare such ribozyme is. After the construction with hard effort, I conducted the strategy as

time allowed. Further analyses are required to conclude there is functional and very short ribozyme, but data suggested there is. I could not finish the project; I could not reach the point I wanted to get to. But I tried hardest, did my best and do not feel regret. For this work I was given a lot of support from my colleges and workers in the same corridor (Figure 3, with much appreciation). (The detail of the project was not described because it has not been published yet.)

Aside from many invaluable experiences with researches, social activities provided me with big assets. True, networking is one of the most important things to build your career. I met and formed connections with a lot of superior people doing great jobs in various field. It is natural to meet Americans in the USA, but on top of that, I met many Japanese people working overseas with great ambition by aggressively joining different meet ups such as みんなの仕事 &研究を知ろうの会 (Figure 7) and Life Science in Japanese/ Research@Stanford. Some persons are working researchers in varied field such as economics, medical science, inorganic chemistry, cosmic physics, geoscience, and biology (various fields different from my specific one: plant



Figure 1



Figure 2



Figure 3



Figure 4

biology, system biology, cell communication, and more). Some are working as a journalist, news reporter, system engineer, software engineer, graphical designer, physical therapist, hair dresser, trainer, and so on in various places or companies. The opportunities to meet such people in Japan are very rare despite the fact that you should willingly meet those kinds of energetic people if you have energy to be active in the world. I will be. I will keep and expand the connection, and become a researcher making an impact all over the world.

All in all, I truly developed as a person and a researcher through diving into the overseas internship. I swear, I will build on this precious experience, and will be great.