

(For JSPS Fellow)

Form B-5

Date (日付)

22/02/2013 (Date/Month/Year: 日/月/年)

Activity Report -Science Dialogue Program-
(サイエンス・ダイアログ事業 実施報告書)

- Fellow's name (講師氏名): Olakunle Adeegbe (ID No. P12423)
- Participating school (学校名): Hiroshima University High school
- Date (実 18/02/2013 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) T regulatory cells (T regs); the good and the bad sides
(in Japanese) 制御性 T 細胞の良い面と悪い面

- Lecture summary (講演概要): Please summary your lecture 200-500 words.

In this lecture, i introduced my country of birth, explaining many aspects of our culture such as official national language, tribes, food, sports, and art. I went on to explain that many aspects of my culture are similar to that of Japanese including our festivals, and the custom of respecting our elders. From here, i expanded on my educational career and discussed my travels across four continents which culminated in a JSPS post-doctoral fellowship in Japan. After this introductory section, i discussed my reasons for coming to Japan and why I chose my sensei's lab for further training. They were briefly introduced to my research institute, the lab, a few instruments, and the research team. To introduce the research field of immunology to them, i explained using graphics what an immune system is and how it aids in warding off bad things such as germs and diseases. I expanded on this concept by describing special immune cells called "T cells" and an even more special smaller population of T cells called "T regulatory cells or T regs." From here on, I discussed my research as it relates to "autoimmune diseases." The students were briefly shown slides explaining how the "T regs" help to prevent these type of diseases, examples of which i provided as pictures in a subsequent slide. To appreciate this important job of "T regs," I explained some of my work showing how autoimmune disease was prevented in mice that would normally develop this condition after they were injected with Tregs. Further along in the talk, i also introduced my other project which involved the unwanted job that "T regs" perform in cancer settings, making their removal a necessity in order to effectively treat cancer. They were shown pictures of tumor size on mice which have or have not been treated with drugs to eliminate Tregs. Lastly, my talk focused on another arm of this project which is helping "fighter" T cells to become less tired and be able to effectively eradicate tumors. I used the analogy of burnt out light bulbs to explain how cancer-fighting T cells can become exhausted but with the help of certain drugs, it may be possible to remove such "tiredness" and get them to "light up" again. To wrap up, i gave them the basic take home lesson in which i demonstrated

with a 10yen coin that "T regs" are like a coin with two sides: their job can be good on one side such as in preventing autoimmune disease but it may be bad on the other side especially for cancer where they can disturb the killing activity of cancer-fighting cells. In the last few minutes, i advised them to work hard and explore their dreams passionately. Overall, the students seemed engaged in the lecture.

- Language used (使用言語): English

- Lecture format (講演形式): Powerpoint

◆Lecture time (講演時間) 50 min (分), Q&A time (質疑応答時間) 10 min (分)

◆Lecture style (ex.: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))

Used projector, pictures on slides, visual aids, body gestures for descriptive concepts

◆Interpretation (ex.: assistance by accompanied person, provided Japanese explanation by yourself) (通訳 (例: 同行者によるサポート、講師本人による日本語説明))

I had an interpreter who accompanied me and provided translation where necessary

◆Name and title of accompanied person (同行者 職・氏名)

Kodama Takao, Ph.D.

◆Other note worthy information (その他特筆すべき事項):

It was an enjoyable experience for me as well as the students.

- Impressions and opinions from accompanied person (同行者の方から、本事業に対する意見・感想等がありましたら、お願いいたします。):

Accompanying person informed me that i spoke clearly and my command of English was very easy for the students. He mentioned the lecture was well drafted and executed. I was also informed the students echoed the same sentiment.