

(For JSPS Fellow)

Form B-5

Date (日付)

29/09/2011 (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): Guangai Xue (ID No. P11216)

- Participating school (学校名): Tochigi Prefectural Utsunomiya Girls' High School

- Date (実施日時): 28/09/2011 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) Studies on the host factors regulating HIV-1 replication in human dendritic cells

(in Japanese) ヒト樹状細胞におけるHIV-1複製を制御する宿主因子に関する研究

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

Acquired immunodeficiency syndrome (AIDS) is caused by the type-1 human immunodeficiency virus (HIV-1). This lentivirus specifically targets the cells of the human immune system, such as macrophages, dendritic cells and CD4+ T cells. Viral infection ultimately leads to depressed immune responses, leaving the infected patient susceptible to opportunistic infections. First reported in 1981 in the United States, AIDS has become a major worldwide epidemic. By the end of 2008, almost 60 million people had been infected with HIV and 25 million people died from HIV-related conditions. I presented the effects of human immunodeficiency virus-1 (HIV-1) and its Vpr transactivator in primary dendritic cells (DCs, CD14+ and CD34+) using DNA microarray analysis and functional assays to assist in the elucidation of signaling pathways and cellular factors involved with the HIV-1 replication. In immature DCs, I have found that Vpr seems related to IL1 signaling pathway. These studies will for first time to investigate HIV-1 Vpr- host factor interactions in primary macrophages and dendritic cells, may contribute to find new insight of Vpr's function. During the presentation, I had tried to explain about the key words, principle of

biological experiments. In addition, I also had talked that what should we be careful as a researcher.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 60 min (分), Q&A time (質疑応答時間) 0 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

◆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))

By myself

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

N/A

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

- 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。):