

Form B-5

Date (日付)

01.02.2016 (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): Dr. Michaela Gerlach (ID No. P15112)
- Participating school (学校名): Fukui Prefectural Wakasa High school
- Date (実施日時): 29.01.2016 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) Immune response to virus infection  
(in Japanese) ウイルス感染に対する免疫反応
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

**Immune response to virus infections**

Viruses are a danger to humans causing mild symptoms to more severe diseases or death. Therefore, virus infection must be stopped quickly to ensure the survival of the host.

Viruses are small infectious structures that multiply only inside living cells of other organisms. Thereby, viruses can infect various types of life forms, like plants, insects, animals and humans. To stop virus infection a fast detection of the virus is required. Virus detection starts an immune response and antiviral proteins are synthesized. At the end, virus infection is cleared and a memory is formed to allow future protection against the same virus. In turn, viruses have mechanisms to stop the immune response resulting rapid spread and a bad ending for the host organism.

The "science dialogue" presentation will be divided in 3 parts. The first part will introduce my reasons for becoming a scientist and how the life of a scientist looks like. The second part will be about viruses, the immune reaction to virus infections and a short introduction of my research. At the end, small groups will perform an experiment to analyze how a single viral protein decides between survival and death of the host organism.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 90 min (分), Q&A time (質疑応答時間) 30 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))

Power point presentation and experiment

◆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))  
assistance by accompanied person \_\_\_\_\_

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

Mai Wakimoto · 大学院生 博士1年

◆Other noteworthy 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。):