

(For JSPS Fellow)

Form B-5

Date (日付)

28/11/2013 (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): AHMED ASKORA (ID No. P13086)

- Participating school (学校名): Hiroshima University High School (Hiroshima City)

- Date (実施日時): 22/11/2013 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) Bacteriophages and Future Biotechnology

(in Japanese) バクテリオファージと今後のバイオテクノロジー

バクテリオファージ: バクテリアに感染するウイルスのこと

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

The lecture was divided into three parts; the first part included a short introduction on my career and academic position in University. The second part was on the motives for becoming a scientist. Scientists choose to become scientists because they are fundamentally curious about the world around them and how the things in it work. A scientist investigates how the universe, or specific parts of it, works. Scientists formulate hypotheses from early observations, then test those hypotheses with additional observations and experiments in which they can measure those results and confirm or refute their hypotheses. Starting in high school, and continuing into your undergraduate years in college, you should take classes that teach you the analytical and critical thinking skills you will need to be a scientist. The third part was on the important and interesting finding about my research on bacteriophages that offer a way to fight resistant plant pathogenic bacteria. Bacteriophage therapy is an important alternative to antibiotics in the current era of multidrug resistant pathogens. It will be increasingly important to better understand the interactions between phages and their bacterial hosts in order to fully exploit their antimicrobial potential and to effectively control their populations in bio-industries. Interestingly, our bacteriophages may serve

as an efficient tool to control bacterial wilt in crops by decreasing the virulence of the pathogen.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 70 min (分), Q&A time (質疑応答時間) 20 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 data show (power point presentation), open forum, group discussions and

Q and A

◆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))

Assisted by accompanied person

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

Dr. Takeru Kawasaki

◆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。):