

(For JSPS Fellow)

Form B-5

Date (日付)

08/09/2014**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): Michael Thomas CORBETT (ID No. P14035)- Participating school (学校名): Chiba Prefectural Funabashi Senior High School- Date (実施日時): 08/09/2014- Lecture title (講演題目): A Global Perspective on Science(in Japanese)

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

A global perspective on science was presented from both cultural and scientific standpoints. The cultural perspective provided an introduction to the educational system in the United States highlighting key differences from Japan's educational system at the secondary school and university levels. Insight on how American culture has impacted education in America with a focus on mathematics and science coursework requirements was discussed. The scientific perspective provided an introduction to the field of organic chemistry while focusing on raising awareness of the impact and importance of organic chemistry on society. An introduction to organic compounds was achieved by demonstrating the prevalence of organic compounds in everyday life. The importance of structural differences in organic compounds was demonstrated by introducing the chemistry of smell and taste. The concept of chirality was introduced as it relates to the way the human body recognizes chiral molecules to highlight the importance of the field of asymmetric catalysis as a method to strategically synthesize enantiopure organic compounds for biological and medical applications. An introduction to asymmetric catalysis was presented highlighting the important work of Japanese chemists, such as Ryōji Noyori, followed by a brief discussion on how asymmetric reactions are developed in the laboratory using the scientific method. The lecture was concluded with a discussion on my doctoral research and how it can be applied towards improving the synthesis of paclitaxel, an important anticancer therapeutic.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 80 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))

Used projector for presentation; brought chemicals to demonstrate chemistry of smell

◆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))

Bilingual slides during presentation

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

◆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。):