

Form B-5

Date (日付)

11/01/2012 (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): Tim Stasevich (ID No. P 10172)

- Participating school (学校名): Ena Highschool

- Date (実施日時): 11/01/2012 (Date/Month/Year:日/月/年)

- Lecture title (講演題目): (in English) Seeing Cells in Action!

(in Japanese)

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

I first discussed my home state, Michigan, USA. This included a brief description of Michigan's geological history and some facts about the Great Lakes, as well as a brief history of the car industry in my home city Detroit. I next discussed my education at the University of Michigan and why I decided to become a scientist. This ultimately transitioned into a discussion of my current research in Japan. I introduced my research with some pointed questions: Why are cells in our body different if they have the same DNA? Why do cells sometimes become cancerous? How can stem cells become other types of cells? This led to a discussion of genes and how they are turned on and off to change the character of a cell. I used animated slides to make this discussion clear with simple English. I next discussed how new advances in fluorescence microscopy (in particular, the use of the jellyfish green fluorescence protein first isolated by Osamu Shimomura) are making it possible to visualize the turning on and off of genes in living cells. I demonstrated the basics of fluorescence with GFP and laser pointers. These were passed around so the students could try for themselves. I concluded by showing movies of my latest results using fluorescence to see genes being activated in real time.

- Language used (使用言語): English with some Japanese during Q&A

- Lecture format (講演形式):

◆Lecture time (講演時間) ~45min (分), Q&A time (質疑応答時間) ~15 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))

Powerpoint animated slides and interactive demo with fluorescent protien and laser pointer

◆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))

Some assistance from Ms. Nagomi Yamauchi, an English instructor at Ena.

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

Was not accompanied

◆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。):