

(For JSPS Fellow)

Form B-5

Date (日付)

22/07/2016 (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): Timothy Day (ID No. P16089)
- Participating school (学校名): Shiga Prefectural Hikone Higashi High School
- Date (実施日時): 13/07/2016 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) Developmental Biology: Understanding how we are made.
(in Japanese) _____
- Lecture summary (講演概要): Please summary your lecture 200-500 words.
I begin my presentation describing some aspects of my culture, as an American. And next describe my early career development and education on my path to science. Afterwards, I speak about my research field and general themes of developmental biology, with a focus on developmental genetics. I talk about the major aspects of developmental biology, including morphogenesis, differentiation, patterning, and gene expression. I show how we use the mouse model organism to research how stem cells or primitive cells differentiate into tissues which have various functions, and why it is important to be able to use model organisms as a substitute for humans. My past work has focused on the development of the mouse limb, and I show how by using molecular biology techniques we can remove a gene from the mouse to understand the role of the gene. I detail the effect of the removal of beta-catenin on the development of bone. I then show my current research investigating interactions between the mother's uterus and the fetus, and how it can affect development. To study this our group has developed a method to create 3D models of *in vivo* and *in utero* tissues with high accuracy.
- Language used (使用言語): English
- Lecture format (講演形式): Powerpoint
- ◆Lecture time (講演時間) 75 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))
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))
I prepared a glossary of terms used in the presentation in English, and had them translated to Japanese.
- ◆Name and title of accompanied person (同行者 職・氏名)
None
- ◆Other note worthy information (その他特筆すべき事項):

Must be typed

- 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。):