

(For JSPS Fellow)

Form B-5

Date (日付) 27/2/2017

(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): Yosvany Lopez Alvarez (ID No. P15385)

- Participating school (学校名): TAKEZONO High School

- Date (実施日時): 20/2/2017 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) An Approach to Medical Genomics

(in Japanese)

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

This lecture was mainly about biology and genomics with brief references to how biological knowledge is being used nowadays to push the boundaries of medical genomics. Its first part consisted of one short introduction to my country's culture and educational systems. The second part touched basic concepts of biology in order to make students refresh those learned concepts. Among these concepts were the definitions of prokaryote and eukaryote cells, their main differences and the importance of the nucleus in cellular activity. In this part I also referred to the mechanisms of replication, transcription and translation as well as their roles in defining the phenotype of a cell. The above biological mechanisms were explained in detail by incorporating additional elements, such as promoters, transcription factors, insulators, enhancers, proteins, which facilitate them. The third part focused on high-level genomic structures like the chromatin and its diverse modification mechanisms through histone modifications. In this part, I emphasized the importance of finding chromatin modification marks playing key roles in the transformation of healthy tissues into cancerous ones. Finally, I concluded with one motivational message intended to convey the necessity for future scientists to go into the details of one specific research field.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 45 min (分), Q&A time (質疑応答時間) 10 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

◆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))

Key words were provided beforehand and translated into Japanese by the school professors. Other words were explained by myself when necessary.

◆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):

The biology professors of Takesono High School were very kind and always willing to make my short stay enjoyable. The students were also well-prepared and asked me several interesting questions. In general, a very positive impression from this science dialogue.

- 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。):