

(For JSPS Fellow)

Form B-5

Date (日付)

23/12/2016 (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): TAMBI RICHA (ID No. P15080)
- Participating school (学校名): Tokyo Metropolitan Tama High School of Science and Technology
- Date (実施日時): 19/12/2016 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) Bioinformatics in Biotechnology

(in Japanese)

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

I am working in the field of protein bioinformatics. Bioinformatics is a combination of biology and computers. Computers are used to assemble, analyze and interpret the biological data. It is a very interesting field and has a very wide scope. Therefore, I decided to introduce the high school students to the basics of this field following which, I explained my overall research work. During my talk I gave an overview of biotechnology and introduced bioinformatics, explaining its importance and, also discussed some of the most interesting and related research areas. My talk was divided in four sections as given below:

In section 1 I introduced myself and gave overview of my country and my current workplace.

In section 2 I discussed the importance of biotechnology.

In section 3 I explained the connection between bioinformatics and biotechnology. I further explained and demonstrated some of the basic bioinformatics approaches which included explaining the structure and usage of different types of protein databases and use of BLAST for the finding the similarity between the sequences.

In section 4 I briefly introduced my research field "Protein bioinformatics". In this section I explained the importance of proteins, summarized the reasons for studying proteins on computers and finally told the students about how one can use machine learning tools and predict the sub-structures of proteins.

I concluded my lecture by telling the students about various new and interesting sub-fields of protein bioinformatics. Each section was summarized in Japanese in about ~5min by Ms. Marine Limouzin. After finishing my lecture, I conducted a small quiz and asked students a couple of questions related to the topics I had explained in my lecture.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 100 min (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))

Power point presentation

◆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))

Yes

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

Marine Limouzin, Undergraduate 4th grade student, Tokyo University of Agriculture and Technology Kuroda Laboratory

◆Other note worthy information (その他特筆すべき事項):

None

- 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。):

Ms. Marine Limouzin assistance was extremely helpful. Her translations (of my slides) enabled the high school students to better understand my lecture.