様式 A-1 (FY2023) SD ※弊会記入欄 (学校用)

2023 年 7 月 31 日

サイエンス・ダイアログ 実施報告書

1.	学校名·実施責任者氏名:筑波大学附属駒場高等学校·須田智之
2.	講師氏名:Dr. Steven Batinovic
3.	講義補助者氏名: なし
4.	実施日時: 2023 年 6 月 10 日(土) 10 : 30 ~ 12 : 20
5.	参加生徒: <u>2</u> 年生 <u>9</u> 人、 <u>年生</u> 人、 <u>年生</u> 人(合計 <u>9</u> 人) 備考:(例:理数科の生徒)
6.	講義題目:JSPS Science Dialogue
7.	講義概要: オーストラリアの紹介とバクテリオファージ研究について
-	講義形式: ⊠対面 ・ □オンライン (どちらか選択ください。)) 講義時間 <u>90 分</u> 質疑応答時間 <u>20 分</u>
2) 講義方法 (例:プロジェクター使用による講義、実験・実習の有無など) プロジェクター使用による講義、実験器具を提示しての解説

事前学習
有 ・ 無 (どちらかにOをしてください。)
使用教材 ______

9. その他特筆すべき事項:

・実験機器を実際に持ち込んでくださり、実験の方法について紹介してくださったのが印象的でした。

Form B-2 (FY2023) Must be typed

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): BATINOVIC Steven Adam (ID No.P20714)

- Name and title of the accompanying person(講義補助者の職・氏名)

NA

- Participating school (学校名): _ Junior and Senior High School at Komaba

- Date (実施日時): <u>10/06/2023</u> (Date/Month/Year:日/月/年)

- Lecture title (講義題目): _____JSPS Science Dialogue - Viruses dont just infect humans - they infect bacteria too!

- Lecture format (講義形式):

- ◆⊠Onsite ・ □Online (Please choose one.)(対面 ・ オンライン)((どちらか選択ください。))
- ◆Lecture time(講義時間)<u>50 min(分)</u>, Q&A time(質疑応答時間)<u>10 min(分)</u>

◆Lecture style(ex.: used projector, conducted experiments) (講義方法 (例:プロジェクター使用による講義、実験・実習の有無など)) Presentation by projector

- Lecture summary (講義概要): Please summarize your lecture within 200-500 words.

The lecture was broken roughly broken into three main parts; 1) An introduction to myself, where I live (Australia) and the way I became a scientist. 2) An introduction to the fields of science I work in; Microbiology, Molecular biology, Genomics and Bioinformatics. I then used successive slides to explain to the students what bacteriophages are (viruses that infect bacteria) and why we're interested in studying them (medical applications). I then went on to explain bacterial genomics and how we use DNA sequencing to do our research. As part of this I explained a new technique of sequencing that has been around in the scientific community for the past 3-4 years, known as Nanopore Sequencing, and I showed a video of how it works. I also brought in a Nanopore sequencing instrument (smaller than a mobile phone) and some of the equipment we use to prepare DNA for sequencing (i.e. a magnetic rack for DNA separation). The concept here was to let the students see some of the new equipment we actually use in the lab and show how accessible (both size and cost) these techniques are in modern times. 3) The final section of the lecture explained some of the research I have done in the past, and currently doing in Japan, mostly focusing on key areas talked about previously such as DNA sequencing, bacteria and bacteriophages.

