

Form B-2
(FY2022)
Must be typed

Date (日付)
4/10/2022 (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): Panji Nursetia Darma (ID No. P21356)

- Name and title of the lecture assistant (講義補助者の職・氏名)
千葉大学 博士前期課程 2 年 酒井香太郎 千葉大学博士前期課程 1 年 大池玲子

- Participating school (学校名): Chiba Municipal High School

- Date (実施日時): 21/09/2022 (Date/Month/Year: 日/月/年)

- Lecture title (講義題目):
Medical Application of Electrical Impedance Tomography (EIT)

- 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) 75 min (分), Q&A time (質疑応答時間) 15 min (分)
◆ 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))
used projector and conducted experiments

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

In order to make the students easier to understand the lecture content and grow their motivation to become scientists, Sakamaki San (Chiba Municipal High School Teacher) and I decided the contents of the lecture are (1) Introduction to Indonesia (2) Scientist motivation and daily life in Chiba University (3) Medical Application of Electrical Impedance Tomography. The day before the lecture (20/09/2022), Oike San (a master's student in our lab) explained the lecture in Japanese, and one week before the lecture, we sent the abstract of our lecture to students in order to make them easier to understand the lecture. I was trying to make an interactive lecture by showing many pictures and movies in my presentation. Furthermore, I said to them during the lecture I would ask them some questions and give them presents from Indonesia if they correctly answered the questions. The lecture is divided into two sessions. The first session was (1) Introduction to Indonesia and (2) Scientist motivation and daily life. The second session was (3) Medical Application of Electrical Impedance Tomography. Between each session was 10 minutes break. Furthermore, in order to make them truly understand the lecture material, especially for (3) Medical Application of Electrical Impedance Tomography, we brought two demonstrations in front

of them, which are (A) Lymphedema Tomography using wearable EIT demonstration and (B) EIT Image Reconstruction using acrylic rod plus saline water tank. The students were very interested in the demonstration because they could directly try our research prototypes. In the end, I gave two students presents from Indonesia because they answered the quiz correctly.

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

Sakamaki San (Chiba Municipal High School Teacher) was really helpful in giving the idea to make the lecture easier to understand.

- Impressions and comments from the lecture assistant (講義補助者の方から、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。):

高校生のうちから英語で研究の話を聞く経験ができるのは非常に良い経験、刺激になるだろうと感じました。分かりやすいデモンストレーションを実施し、実際に装置を動かしてもらったことで直感的に技術を理解することができたと思います。

留学生かつ優れた研究者から、直接研究活動について、あるいはそのバックボーンである研究へのモチベーションなども含めて話を聞くという経験はとても良い刺激になったと思います。また、研究テーマについて実際に目の前でデモンストレーションを実施し、数人には代表で操作してもらうなど、この経験が科学、研究への興味の一助となればよいなと思います。