

様式 A-1

(FY2023)

2023 年 12 月 20 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: 兵庫県立川西緑台高等学校 山本和也
2. 講師氏名: Dr. Gusty Rizky Teguh RYANTO
3. 講義補助者氏名: なし
4. 実施日時: 2023 年 12 月 19 日 (火) 11:10 ~ 12:15
5. 参加生徒: 1 年生 34 人、 2 年生 1 人、 3 年生 1 人 (合計 34 人)  
備考: (例: 理数科の生徒) 総合理数コースの生徒
6. 講義題目: Searching for new ways to make your Lung healthy! My journey as a doctor and researcher.
7. 講義概要:

My research is mainly about how the lung works when it is healthy, and what changes when it has a disease. The lungs are important for our body to breathe and get oxygen. There are many diseases that can destroy the lung, and one of the most famous one is called Chronic Obstructive Pulmonary Disorder/COPD (慢性閉塞性肺疾患). Many people around the world are affected by this disease. It can cause people to be unable to breathe and more easily develop infections in their lung and die. COPD is caused by many years of smoking cigarettes, and we need to make new drugs to treat this disease. In my research, I found how by changing a protein in the lung cells, we might be able to help prevent COPD. I hope that it could become a COPD drug in the future.
8. 講義形式:

☒ 対面 ・ ☐ オンライン (どちらか選択ください。)

  - 1) 講義時間 45 分 質疑応答時間 20 分
  - 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
  - 3) 事前学習  
☒ 有 ・ 無 (どちらかに○をしてください。)  
使用教材 事前学習プリント
9. その他特筆すべき事項:

Form B-2  
(FY2023)  
Must be typed

Date (日付)  
28/12/2023 (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): Gusty Rizky Teguh Ryanto (ID No.P22113)

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

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- Participating school (学校名): Kawanishi-Midoridai High School

- Date (実施日時): 19/12/2023 (Date/Month/Year: 日/月/年)

- Lecture title (講義題目):

Searching for new ways to make your Lung healthy! My journey as a doctor and researcher.

- 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) 45 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))

A back and forth discussion and Q&A talking about health and my research

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

I opened my lecture by having a small talk with the students about my home country of Indonesia. They took great interest in the culture, the daily life, and the food of Indonesia. Thanks to the island of Bali, which is famous as a tourist spot, some of them knew about Indonesia a little bit before my talk. From there, I talked about my experiences as a medical doctor in Indonesia and how I found that there is a large amount of people smoking cigarettes habitually. I explained the consequences of prolonged smoking, which is the occurrence of chronic obstructive pulmonary disease (COPD). I showed the difference of a normal lung and those with COPD, both macroscopically and microscopically.

With that explanation as an introduction, I continued explaining shortly about what I do as a medical researcher. I showed how us researchers perform our job by observing, performing experiments and measuring it, and, once we get the results, announcing our results to the community so that it could be of use for the general population. I gave a small glance of what I do related to lung and COPD research that I did currently, and I showed the example of Professor Shinya Yamanaka, of whom everybody in the class were familiar with, as a researcher who

acheived great fame due to his work. Lastly, the Q&A session were filled with questions about my home country and appreciation for my talk about science.

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

The teaching staff and students of Kawanishi-Midoridai High School were incredibly helpful and welcoming to me during my visit there, for which I am incredibly thankful.

- Impressions and comments from the accompanying person（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。）:

