

様式 A-1  
(FY2024)

2024 年 6 月 24 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: 山梨県立日川高等学校 伊東弘美(英語科教諭)
2. 講師氏名: Dr. G. Philippe
3. 講義補助者氏名: Takahashi, Rei
4. 実施日時: 2024 年 6 月 14 日 (金) 14:00 ~ 15:40
5. 参加生徒: 3 年生 32 人、 年 生 人、 年 生 人 (合計 32 人)  
備考: SSH クラスの生徒(在籍 41 名、当日 9 名欠席)
6. 講義題目: Researching new therapies all around the world
7. 講義概要: ①母国の地理・文化・教育について／現在に至るまでの経緯  
②ペプチドを用いた副作用の少ないがんの治療方法の研究について
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 45 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)  
プロジェクターを使用した講義
  - 3) 事前学習  
☒ 有 ・ ☐ 無 (どちらかに○をしてください。)  
使用教材 講師に事前に依頼した単語リスト、参考動画リスト、当日使用するパワーポイント資料
9. その他特筆すべき事項:

特にありません

**Form B-2**  
**(FY2024)**  
**Must be typed**

Date (日付)  
17/06/2024 (Date/Month/Year: 日/月/年)

**Activity Report -Science Dialogue Program-**  
(サイエンス・ダイアログ 実施報告書)

- Fellow's name (講師氏名): Gregoire Philippe (ID No. 971058)
- Name and title of the lecture assistant (講義補助者の職・氏名)  
Ms. Rei Takahashi
- Participating school (学校名): Hikiwa high school, Yamanashi
- Date (実施日時): 14/06/2024 (Date/Month/Year: 日/月/年)
- Lecture title (講義題目):  
Researching new therapies all around the world
- 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) 60 min (分), Q&A time (質疑応答時間) 30 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))  
Presentation with projector

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

This presentation was a lecture in two parts, focusing on my personal experience as a researcher in drug design and biochemistry. In the self introduction part, I emphasised on the importance of learning english and the different aspects that have made my work in academia enjoyable and at times challenging. I have introduced my background and homecountry, with a follow up on the different places I have been to for studying and presenting my work abroad. The second part of the talk started with the definition of research and important notions of drug design (agonist and antagonists). I then explained why targeting protein-protein interactions is interesting, and made the link with what they have studied at school on how to get proteins from DNA (central dogma). I then explained how we can use ribosomes to make peptides and proteins from DNA much faster than with chemistry and how this helps us screen a very high number of different amino acid combinations. I then explained how the mRNA display that we use in the Suga lab works in theory and gave some details on how in works in practice and that it allows us to obtain peptide binders with high affinity for a protein. Finally, a gave a short introduction to my previous work, in which we take these high affinity binders, modify them chemically and assess their drug like properties using biochemistry and biophysic techniques.

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

The Q&A session was well prepared by the teacher and the students, which made for an enjoyable and interesting time.

- Impressions and comments from the lecture assistant (講義補助者の方から、本プログラムに対する意見・感想等がありましたら、お願いいたします。):

Ms. Rei Takahashi enjoyed the dialogue as well. She suggested that maybe having an icebreaker could be a fun way to get the students to be less shy during the q&a session, but the one question / student worked well otherwise.