

様式 A-1
(FY2024)

2025 年 2 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: 山梨県立韮崎高等学校 SSH 主任 小田雄仁
2. 講師氏名: Dr. Bright Gyamfi ADU
3. 講義補助者氏名: なし
4. 実施日時: 2025 年 2 月 7 日 (金) 13 : 25 ~ 15 : 15
5. 参加生徒: 1 年生 29 人、 2 年生 34 人、 3 年生 1 人 (合計 63 人)
備考: (例: 理数科の生徒) SSH 対象生徒
6. 講義題目: Nitrogen use efficient rice is important for our survival
7. 講義概要: 栽培された植物は一般的には強い光、低温または高温、干ばつなどの環境ストレスの影響を受けやすい。栽培によって失われた「強靱性」を取り戻す為の研究内容野生イネ由来の窒素吸収や利用を促進する遺伝子の単離と解析をもちいて、人類にとって重要な窒素利用効率の高い米についての講義。
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 85 分 質疑応答時間 15 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
講義内容を5分野に分け、2~3 人のグループごとに担当を決め、英語でプレゼンし、生徒内で共有した。
9. その他特筆すべき事項:

Form B-2
(FY2024)
Must be typed

Date (日付)
8/02/2025 (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): Bright Gyamfi ADU (ID No. P24099)

- Name and title of the lecture assistant (講義補助者の職・氏名)
No one was selcetd as assistant but the ALT of NIRASAKI High School (called Zoe Elizabeth) assisted during the lecture so was Takehito ODA.

- Participating school (学校名): YAMANASHI Prefectural NIRASAKI High School

- Date (実施日時): 7/02/2025 (Date/Month/Year: 日/月/年)

- Lecture title (講義題目):
Nutrient use efficient rice is important for our survival

- 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) 60 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))
PPT was projected

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

I started the lecture by introducing myself and a brief history of my country (Ghana) to the students. This included common games, culture, food of the people of Ghana and tourist sites. From the perceived knowledge of Ghana, I shared with them a brief background on cocoa production and processing into chocolate. I share a bit of my experience and educational background prior to coming to Japan.

I shared with the students that, the advancement of plant science (rice research) in Japan and the culture of the people influenced my journey to Japan hence they should take advantage of the opportunity available to develop their interest in science, research and collaborate with other foreign nationals. This section also included known scientist that I look up to including the works of Dr. Toshinori Kinoshita (Nagoya University) whom I met at the Japan-Estonia science summit, 2024.

I introduced the students to the basics of plant biology, plant nutrition, and important plant nutrients. Further talks detailed the need to reduce fertilizer usage without the negative effect on

yields and some ongoing research across the world to enhance sustainable rice production.

With regards to my field of research, I discussed my Ph.D studies and the need for hardy crops that are tolerant to the effect of changing climate, specifically nutrient efficient rice that are tolerant to low fertilizer conditions.

Finally, I spoke about the fun of doing research and the importance of taking on challenges overseas. Here we discussed science and research in general, available opportunities and supports for research, and the need to for collaboration and learn different languages specifically English. More importantly, an opportunity was given to the students to ask questions at three different times where interesting feedback was received from the students.

To conclude, the lecture gave insights into my country, academic and research journey and the need for research in solving global challenges while enhancing cultural exchange.

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

The confidence of the students to ask questions for clarity. I got not less than 3 interesting questions per each question/discussion forum which was encouraging. The feedback was encouraging.

- 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。): The ALT assisted very well and that was helpful.



Adu Bright (Ph.D.)
2019 Postdoctoral Fellow
Lab of Plant Nutrition, The University of Tokyo

GHANA

Let's explore Ghana together!

Lab of Plant Nutrition, The University of Tokyo