

(For JSPS Fellow)

Form B-5

Date (日付)

24/06/2016**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): Simon Saucet (ID No. P15768)
- Participating school (学校名): Hosei Univ. Girls' High School
- Date (実施日時): 09/06/2016
- Lecture title (講演題目): Research on the battle between plants, microorganisms and other plants

- Lecture summary (講演概要): Please summary your lecture 200-500 words.
Every day, living organisms are confronted to other organisms. The resulting interactions can be benefiting to the two partners. In the other hand, some organisms evolved as parasites and grow on the detriment of their host. Parasitism often weakens the host, triggers disease symptoms and sometimes ends up with the death the host. Therefore, those parasites are also considered as infectious pathogens. Pathogens, such as viruses, bacteria and fungi, develop a wide array of infecting strategies with the production of effector proteins and toxic compounds. To counter attacks by pathogens, higher organisms such as humans and plants evolved immune systems that can detect the pathogens and activate defence mechanisms in order to protect them from the disease. In my research, I am very interested in plant and pathogen interactions. I will give you more details about this topic and I will explain to you how I became interested to it through my international career. This research theme is critical as it produces knowledge for the protection of crops plants and food security. In Japan, I am studying parasitic plants. These plants are remarkable as they evolved to become parasites of other plants. In Professor Ken Shirasu's laboratory, we are deciphering the molecular strategies they develop for successful parasitism. Interestingly, they infect mostly their hosts but very rarely other parasitic plants. I will expose to you the different hypotheses that could explain this phenomenon and the related experiments we perform in the laboratory.

- Language used (使用言語): English
- Lecture format (講演形式):
◆Lecture time (講演時間) 100 min (分), Q&A time (質疑応答時間) 10 min (分)

◆Lecture style (ex.: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))

presentation with video projector

◆Interpretation (ex.: assistance by accompanied person, provided Japanese explanation by yourself) (通訳 (例: 同行者によるサポート、講師本人による日本語説明))

The teacher translated difficult English sentences but students understood very well

◆Name and title of accompanied person (同行者 職・氏名)

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

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- Impressions and opinions from accompanied person (同行者の方から、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。):