

(For JSPS Fellow)

Form B-5

Date (日付)

20/09/2016 (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): Edin Jessica Mifsud (ID No. P15716)
- Participating school (学校名): Kushiro Koryo high school
- Date (実施日時): 16/09/2016 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) Infection and immunity
(in Japanese) 感染症や免疫力
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

Translational medical research is basic science that is essential in maintaining and improving human health. This type of research leads to the development of new drugs or vaccines that treat current and emerging infectious diseases as well as non-infectious diseases such as cancer. My research field has focused on understanding how our immune system works to fight off infectious microbes (which is known as immunology), which in turn allows us to identify agents that we can use to treat and prevent disease.

Vaccination is the cornerstone to maintaining public health and limiting the spread of infectious disease. Therefore, the generation of vaccines which elicit protective immune responses within a host are crucial to the global population. Currently, licensed influenza vaccines are egg grown and detergent split. Although these vaccines are used throughout the world, they fail to induce protective immune responses in our most at risk age groups (the elderly and young individuals) leaving these age groups susceptible to more severe influenza virus infections.

My current research focuses on using an alternate influenza vaccine a whole influenza virus particle vaccine that is still egg grown but *not* split and is still unable to replicate within the host. This vaccine has all the properties to activate the innate and adaptive immune systems and generate robust immune responses in our most at risk age groups. Furthermore, this vaccine has the potential to protect us not only from seasonal influenza strains that are constantly evolving but also from new pandemic strains that emerge the population and cause serious disease.

- Language used (使用言語): English
- Lecture format (講演形式):

◆Lecture time (講演時間) 90 min (分), Q&A time (質疑応答時間) 10min (分)

◆Lecture style(ex.: used projector)

(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))

Used projector and had powerpoint presentation

◆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))

Interpretation was performed by accompanied person

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

Assistant professor Takuji Daito

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

- 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。):

It was a great opportunity to talk with high school students and make them interested in science