

(For JSPS Fellow)

Form B-5

Date (日付)

01/02/2016 (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): Alexander Holm Viborg (ID No. P)

- Participating school (学校名): Gifu Prefectural Ena High School

- Date (実施日時) 20/01/2016 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) The contribution from *Bifidobacterium* and *Lactobacillus* to a healthy human life

(in Japanese)

- Lecture summary (講演概要): Please summary your lecture 200-500 words.

Hello, I'm Alex from Copenhagen in Denmark. I'm an engineer in Biotechnology from Technical University of Denmark. Furthermore, I have a doctor degree (PhD) in Biochemistry. Now, I live in Tokyo since June 2014 where I'm working at the University of Tokyo as a postdoctoral researcher under the Japan Society for the Promotion of Science (JSPS) program. I work in the Enzyme laboratory of Professor Fushinobu at Agriculture and Life Sciences. I work with two different lactic acid bacteria, *Bifidobacterium* and *Lactobacillus*. They live in our gut, in the gut of humans. *Bifidobacterium* and *Lactobacillus* are good friends with humans, they are good for our health. They can eat complex sugars (oligosaccharides), which makes them strong and prevent diseases in humans. *Bifidobacterium* and *Lactobacillus* have special abilities to eat (utilize) certain sugars, that other bacteria can not eat. I study and want to know exactly which sugars and how *Bifidobacterium* and *Lactobacillus* eats them. Especially, I am studying enzymes from *Bifidobacterium* and *Lactobacillus* that eats sugars containing "galactose", a simple sugar almost identical to glucose. If I obtain this information, I can provide *Bifidobacterium* and *Lactobacillus* with exactly these sugars, and they can provide us with good health.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 45+30 min (分), Q&A time (質疑応答時間) 15 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))

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))

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

◆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。):