

(For JSPS fellow)

Form 3

Date (日付) **19 November 2010**

(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 (参加外国人研究者氏名): **Julio Cesar VILLENA** (ID No. **P09335**)

Participating school (参加機関(受入学校名)): **Gunma Prefectural Takasaki High School**

Date (実施日時): **13-14 November 2010** (Date/Month/Year: 日/月/年) Time: from **13:30** to **16:40**

Lecture title (講演題目):\_(in English) **Lactic acid bacteria for the prevention of respiratory infections: the contributions of an Argentinean laboratory to the scientific knowledge of immunobiotics.**

(呼吸器感染を予防する乳酸菌:イムノバイオティクスの科学的知見におけるアルゼンチン研究グループの貢献)

Lecture summary (講演概要): **In the first part of the lecture I talked about my country: Argentina. I showed you that Argentina is an attractive tourist destination because it is favored by its ample and varied natural assets (made possible by its geographical extension) and by its cultural offerings. We made an imaginary trip through northern Argentina, from the Calchaquíes Valleys to the Quebrada of Humahuaca and we visited its impressive mountains and multicolor landscapes. Students learned about this important region of Argentina that has always been a crossroads for economic, social and cultural communication. It was a caravan road for the Inca Empire in the 15th century, then an important link between the Viceroyalty of the Río de la Plata and the Viceroyalty of Peru, as well as a stage for many battles of the Argentine War of Independence. In the second part of the lecture, I spoke about the scientific system in Argentina, and specially, I talked about the Reference Centre for Lactobacilli (CERELA) that is a scientific research institute dedicated to the study of lactic acid bacteria (LAB) in two major areas: food and health. I commented in details the benefits of consuming probiotic foods and then I spoke about the contributions of my laboratory to the knowledge of the effect of LAB in the respiratory immune system. I showed that my laboratory in Argentina has demonstrated that the administration of some probiotic LAB strains is able to improve defenses against respiratory pathogens, in both, immune-competent and immune-compromised hosts and that some LAB can be used as effective vaccines against respiratory pathogens. In this lecture, Takasaki high school students learned about an interesting topic of scientific research in the field of immunology and microbiology.**

Language used (使用言語): **English**

Lecture format (講演形式):

- Lecture time (講演時間) **70 min** (分), Q&A time (質疑応答時間) **50 min** (分)
- Lecture style(**Powerpoint presentation using projector, Tasting of probiotic products provided by Meiji Milk company**)  
(プロジェクターによる講演。明治乳業製品の試食)
- Interpreter (assistance by host scientist)  
(通訳 (受入研究者によるサポート))

Name and title of assistant (協力者 職・氏名) (Haruki Kitazawa, Associate Professor)(北澤春樹、准教授)

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

Impressions and opinions of assistant

(協力者から本事業に対する意見・感想等がございましたら、お願いいたします。):

本事業に参加し、高校生のサイエンスに対する向学心と、教員による緻密な指導を肌で感じる事ができました。理科離れが懸念される中で、明るい兆しを実感するとともに、大学における高度教育に対する取り組みをより一層強化し、向学心に満ちた学生が満足できるよう頑張りたいと思います。本事業は、科学立国日本のさらなる発展を支えるためにも、是非とも継続し、益々発展させる必要があると強く感じました。貴重な機会を頂きました日本学術振興会および高崎高校の関係者の方々にこの場をかりて深く御礼申し上げます。