

(For JSPS Fellow)

Form B-5

Date (日付)

22 日 7 月 2015 年 (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): SANDOVAL, Felipe (ID No. P15011)
- Participating school (学校名): Ibaraki Prefectural Namiki Secondary School
- Date (実施日時): 3 日 7 月 2015 年 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) Confounder Hunting: Where Biostatistics Meets Econometrics
(in Japanese) 交絡因子探索: 生物統計学と計量経済学、コンビ結成!
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

We tend to believe that every reaction can be fully explained by a single reason. That is usually not true. We live in a multivariable world. Every reaction is caused by two or more actions. Some of them can be hardly perceived by untrained eyes.

I asked them to imagine this scenario: an old person falls on a snowy day while walking in the street. Can we blame his physical condition? His shoes? The ice? His judgement? What else can we blame?

Both, biostatistics and econometrics allow scientists to adjust for multiple effects that may contribute to cause a single outcome and see which ones have a stronger effect on the final result when put together.

However, for an effect to be adjusted, we need to find it first! Some effects are very deceiving, because they may apparently be associated with a particular outcome when they are actually not. They confound our reasoning. So, we called them "confounders".

My presentation focused on the relation of economy (econometrics) and health (biostatistics). I invited the students to hunt for confounders, showing them real data from my research and other international examples.

- Language used (使用言語): 英語
- Lecture format (講演形式):
 - ◆Lecture time (講演時間) 35 min (分), Q&A time (質疑応答時間) 5 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))
プロジェクター使用による講演
 - ◆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))

なし

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

適用せず

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

特にありません

- 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。):