（For JSPS Fellow）

Form B-5

Date（日付）
　28/01/2016　　　（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）:　　Jouen Anne-Lise　　　　　　　　　　（ID No.　P 151007　　　　　）

- Participating school（学校名）:　　Jr & Sr. High School at Komaba, University of Tsukuba

- Date （実施日時）: 16/01/2016　　　　　　　　　　　　　　　（Date/Month/Year:日/月/年）

　　　- Lecture title（講演題目）:　（in English）**From study of the brain to robots teachers,**
How to combine Neuroscience and Robotics to ameliorate human-robots interactions

　　　（in Japanese）

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

Neuroscience is the scientific study of the nervous system: how it develops and what it does. More generally, Neuroscientists focus on the brain and its impact on behaviors and cognitive functions. As a cognitive neuroscientist, I work on the study of higher cognitive functions that exist in humans (language, memory, thinking, actions…) and their underlying neural bases : it means that my aim is to understand what happens in the brain when humans move, talk, think... For that purpose, I use neuroimaging techniques that allow me to "see" the activity of the brain (which parts of the brain are activated when a human moves, talks, thinks…). From these images, I try to understand the neural mechanisms (how the different parts of the brain interact) to reach a better understanding of how the brain works.

In the first part of my presentation, I will talk about the profession of neuroscientist: how it can be interesting and funny, and why I chose to become a scientist. In the second part of my presentation, I will present my experiments with robots. Robots will become more and more present in our societies (we can already meet the robot Pepper at Softbank!) and we will have to interact with us in everyday life activities. In particular, in Professor Hiraki's laboratory at the University of Tokyo, I work on the use of robots as pedagogical tools: in my experiments, I will use robots to teach foreign languages to children. Just imagine how great it would be to have your personal robot teacher at home, helping you to learn a new language or to do homework!

However, neuroscience experiments show that it is difficult for the human brain to interpret robot's movements, emotions or facial expressions. This can lead humans to dislike or reject robots (technical call : the uncanny valley). I will show you how we can use Neuroscience to understand and ameliorate our interactions with robots.

- 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）　30　　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, demo robot Nao
　◆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））
　　　None , english only
　◆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。）: