

(For JSPS Fellow)

Form B-5

Date (日付)

06/11/2015 (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): Damee CHOI (ID No. P15013)

- Participating school (学校名): Fukuoka Prefectural Meizen High School

- Date (実施日時): 20/10/2015 (Date/Month/Year:日/月/年)

- Lecture title (講演題目):

(in English) Oxytocin receptor genetic variation modulates brain activity and personality

(in Japanese) オキシトシン受容体遺伝子多型が脳活動と性格に及ぼす影響

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

Oxytocin is an important neuroactive hormone for social behaviors. Previous studies have reported that genetic variation in the oxytocin receptor is associated with individual differences in response to social cues such as human faces. However, it remains unclear whether the oxytocin receptor gene modulates responses to nonsocial cues, such as inanimate objects. Therefore, in the present study, we investigated the relationship between the oxytocin receptor gene rs53576 and brain activity evoked by watching images depicting either humans or inanimate objects. Eighty-three Japanese men (GG, n = 10; GA, n = 43; AA, n = 30) participated in this study. We found that GG/GA individuals displayed greater automatic response than AA individuals regardless of image content (human or object). This suggests that GG/GA individuals have a tendency to respond to emotional stimuli more automatically than AA individuals, even when stimuli do not contain social cues. GG/GA individuals also showed higher self-reported trait empathy, in accordance with previous studies. These results suggest that genetic variation in the oxytocin receptor gene might account for individual differences in emotional processing of both social cues and nonsocial cues. In conclusion, our findings suggest that genetic variation in the oxytocin receptor gene modulates a wide range of social and emotional behaviors.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 50 min (分), Q&A time (質疑応答時間) 20 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))

used 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))

provided Japanese explanation by yourself

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

N/A

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

none

- 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。):

none