（For JSPS Fellow）

Form B-5

Date（日付）

　　23/3/2015　　　　　（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）:　 Shahjahan Md.　　　　　　　　　　　（ID No.　P 14068　 ）

- Participating school（学校名）:　 Kokusai Joho High School, Minamiuonuma City, Niigata　

- Date （実施日時）:　　　 20/3/2015　　　　　　　　　　（Date/Month/Year:日/月/年）

- Lecture title（講演題目）:　(in English)Hormonal regulation of spawning migration in grass puffer

　　（in Japanese）クサフグで産卵回遊のホルモン調節

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

In the beginning of the lecture I was talking about my homeland, the Bangladesh, showing some pictures. I mentioned cultures, ideas and famous places in my country. I also mentioned about my present position and Sado Marine Biological Station of Niigata University.

In the main scientific part of the lecture, I was talking about hormonal regulation of spawning migration in grass puffer. I divided whole lecture in three sections according to the suggestions of English teacher of that school.

Firstly, spawning behavior of grass puffer in nature and aquarium, showed some video. Grass puffer showed unique spawning behavior: spawning occurs on beach with semi-lunar rhythm and is conducted by a group of 10-60 males and 1 female.

Secondly, seasonal expression patterns of several neurohormone genes encoding three GnRHs (*gnrh1, gnrh2* and *gnrh3*), *kiss2*, *kiss2r*, *lpxrfa* and *lpxrfa-r*. Before explaining seasonal expression patterns, I described the real-time PCR technique by which I measured genes expressions.

Thirdly, diurnal and circadian expression of *kiss2*, *kiss2r*, *lpxrfa* and *lpxrfa-r* along with melatonin from pineal gland and four sub-types of melatonin receptor genes. Before explaining diurnal and circadian expression, I described the reverse transcript PCR technique.

In the end I was encouraging students in science, explaining what great time and a beautiful country they live in, provided them an amazing opportunity in research with the best instruments and facilities.

- Language used（使用言語）: <u>English</u>

- Lecture format （講演形式）:
  ◆Lecture time（講演時間）<u>60 min（分）</u>, Q&A time（質疑応答時間）<u>15 min（分）</u>
  ◆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））
    <u>Lecture was prepared in PowerPoint and presented via a projector on big screen.</u>

  ◆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））
<u>I was talking in English. Some more difficult parts were explained by the high school English teacher and interpreter, who really wanted the students to understand the topic, without letting them being confused.</u>

  ◆Name and title of accompanied person （同行者 職・氏名）
    <u>Mr. Takehiro Ishikawa</u>

  ◆Other note worthy information （その他特筆すべき事項）:
<u>I was impressed by the teachers, students and the school and like this program, I would be happy to participate in another Science Dialogue in the future.</u>

- 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。）: