（For JSPS Fellow）

Form B-5

Date（日付）
20/01/2012 （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）: SONG, Simon Deping （ID No. P 10794 ）

- Participating school（学校名）: Seishin Girls' High School

- Date （実施日時）: 17/01/2012 （Date/Month/Year:日/月/年）

- Lecture title（講演題目）: （in English） Microsatellites Development and Application

（in Japanese）

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

The presentation introduced the application of DNA techniques on animal diagnostic and parentage test. I also reported a method of microsatellite development and a multiple paternity found in a natural population of a wild tobacco fly in Australia by seven polymorphic microsatellites. The lecture introduced techniques and process of the DNA diagnostic tests and parentage verification services to the livestock industry. Using the DNA fingerprint, animal will be distinctly identified for parentage verification, data banking and animal identification of superior sires in multiple-sire breeding scenarios. Testing of genetic conditions for specific genetic conditions will confirm carriers or syndrome-free animals, advance breeding decisions and eliminate the expression of the recessive gene and facilitate marketing decisions. There are 22 or 33 microsatellites used in cattle parentage test service. A number of inherited diseases and production traits can be tested in this service, including arthrogryposis multiplex / neuropathic hydrocephalus, contractural arachnodactyly, pulmonary hypoplasia with anasarca, chondrodysplasia, F94L myostatin muscling mutation, red factor and dominant black and homozygous poll / heterozygous poll. These tests take breeding decisions to the next level by 1) eliminating the uncertainty with parentage in the management of animals, 2) identifying early, those calves with the best genetic potential, 3) making genetic progress on economically important traits that are difficult to measure, 4) increasing accuracy to allow more informed selection decisions and 5) increasing rate of genetic gain.

- Language used（使用言語）: English

- Lecture format（講演形式）:

◆Lecture time（講演時間） 60 min（分）, Q&A time（質疑応答時間） 60 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））

Presentation using 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））

Assistance by accompanied person

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

Mr. ZHU, Huaping

◆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。）:

Mr. Hua provided a fast and exact Japanese explanation on my lecture by his excellent Japanese language skill.