

Form 3

Date (日付) 31/10/2010
(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 (参加外国人研究者氏名): MD. ABDUS SAMAD (ID No. P 09138)

Participating school (参加機関(受入学校名)): SEISHIN GAKUEN HIGH SCHOOL

Date (実施日時): 31-10-2010 (Date/Month/Year:日/月/年) Time: from 11:00 to 12:00

Lecture title (講演題目): (in English) Function of B23, a multifunctional host protein in adenovirus life cycle.

(in Japanese)

Lecture summary (講演概要): B23/Nucleophosmin is multifunctional cellular proteins involved in various cellular processes. A role of this protein is discussed on the adenovirus life cycle. First, I introduced my self and briefly discussed about my country. Next why biology or virology is so important and interesting to me was discussed. For example, Life is the great mystery and virus is the smallest form of life that is active only inside other living cells, called host cells. Virus is a cause of so many deadly diseases. Adenovirus is a model system to know the cellular gene functions. Adenovirus genome consists of linear double stranded DNA of about 36,000 base pairs that condensed inside virion two virally coded core proteins V and VII termed Ad core. After entry into cell cytoplasm, the virion structure is partially disrupted and Ad core enter into the nucleus and new DNA and RNA is synthesized from Ad core DNA. However, new DNA synthesis from Ad core DNA in vitro. B23/nucleophosmin is a host cellular protein involved in the stimulation of Ad core DNA synthesis in vitro. I found B23 removes core protein from Ad core and stimulate Ad proliferation. I discussed primary idea about life, living process, central dogma of molecular biology and how virus multiply inside the host cells and I present a model of how B23 stimulate Ad core DNA replication.

Language used (使用言語): English

Lecture format (講演形式):

Lecture time (講演時間) ~ 45 min (分), Q&A time (質疑応答時間) ~15 min (分)

Lecture style (examples: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、プレ実験など))

Mainly projector but some experiments were also demonstrated.

Interpreter (example: assistance by host or colleague, provided Japanese

explanation by yourself)

(通訳 (例: 受入研究者によるサポート、外国人研究者本人による日本語説明))

Assistance by colleague of host lab.

Name and title of assistant (協力者 職・氏名) (example: host or colleague)

Koshke Kato

Assistant Professor, Dept. of Infection Biology

Graduate School of Comprehensive Human Science, University of Tsukuba.

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

Impressions and opinions of assistant (協力者から本事業に対する意見・感想等がございましたら、お願い、いたします。): I thought it is very attractive event for high or junior high school students. However, it seemed that it is difficult for students to raise a question if scientific contents of lecture are difficult. I thought it is more better that students can studies before lecture using more easier resume provided by lecturers.