

Form B-2  
(FY2020)  
Must be typed

Date (日付)  
2021/01/04 (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): Mohammed Auwal Ibrahim ID No. 19382

- Name and title of the accompanying person (講義補助者の職・氏名)

Dr. Kazuhiko Yamasaki

- Participating school (学校名): Chiba Municipal Chiba High School

Date (実施日時): 23rd December, 2020  
(Date/Month/Year: 日/月/年)

- Lecture title (講義題目): Cooperation of Japan and Nigerian Scientists towards the discovery of new drugs against tropical diseases

- Lecture format (講義形式):

◆Lecture time (講義時間) 120 min (分), Q&A time (質疑応答時間) 40 min (分)

◆Lecture style (ex.: used projector, conducted experiments)

(講義方法 (例: プロジェクター使用による講義、実験・実習の有無など))

1. Projector,

2. Two Video clips to showcase cultural style and another two video clips on Neglected Tropical Diseases

- Lecture summary (講義概要): **Please summarize your lecture within 200-500 words.**

I am Mohammed Auwal Ibrahim from Nigeria but presently, in Japan for a research fellowship at the National Institute for Advanced Industrial Science and Technology (AIST), Tsukuba under the sponsorship of the Japan Society for the Promotion of Science (JSPS) and the supervision of Dr. Kazuhiko Yamasaki. I welcome all of you to this science dialogue program to share some cultural and scientific experiences.

Nigeria is the most populous African country and seventh most populous country in the world, with an estimated population of 206 million distributed across nearly 400 distinct languages. However, the largest spoken languages are Hausa, Yoruba and Igbo with each of them having a fascinating history and culture. Economically, the country is referred to as the "Giant of Africa" due to its largest economy. In my lecture, I will take you through interesting stories about the geography, history and cultures of the major Nigerian languages with emphasis to Hausa language. Also, I will make efforts to stimulate your passion to learn how to speak English

Language more proficiently because the benefits are enormous, especially for a leadership of Japanese in scientific and global affairs.

My motivation to be a scientist commenced from my junior high school where I was introduced to cell and I thought of “creatures” that we cannot see with our naked eyes. Eventually, my interest to solve human problems coupled with my imaginations of the “world of the unseen creatures” motivated me to be a life scientist such that I can contribute to solving human problems.

My current work at AIST, Tsukuba is on drug discovery towards trypanosomiasis which is one of neglected tropical diseases (NTDs). The NTDs are a group of, mostly, infectious diseases predominantly existing in 149 tropical and subtropical countries. The diseases include sleeping sickness, leprosy, rabies, snakebite envenomation, river blindness, bilharzia, guinea-worm disease, dengue, trachoma, elephantiasis and ten others. Approximately, 1.2 billion people are affected by the diseases while their effects on the economies run into billions of dollars annually. Among the NTDs, I am more focused on trypanosomiasis which is caused by a parasite of the genus *Trypanosoma*. There are many problems with the drugs currently used in the treatment of the disease and so, in order to eliminate the disease, great efforts are needed to develop new and more effective drugs. My work represents one of such efforts funded by Japan. During the lecture, I will provide you with information about the NTDs and the importance of eliminating them from the affected societies. I will also introduce you to the basics of trypanosome biology with a very small highlight of my specific project. Finally, the lecture will involve giving you the highlights of standard steps used in discovering and developing a drug which are also similar to the steps presently used for the development of COVID-19 drugs (and vaccine). You are highly welcome to join me for the lecture and I trust that it is going to be an interesting experience for both of us.

◆**Other noteworthy information (その他特筆すべき事項):**

The Science Dialogue programme was a very memorable event for me, as it allows me to directly interact with Japanese high school student and share cultural and scientific issues. It was such a wonderful and rewarding experience for me that words are inadequate for me to express my real joy and happiness provided by the experience. It is highly likely that the science dialogue will be one of the most indelible part of my stay in Japan. Thank you for opportunity.

I was also happy with the enthusiasm of the students demonstrated by numerous scientific and cultural thought provoking questions which I also found interesting. With joy, I answered most of the questions.

Coincidentally, my host received a call over the weekend from a father of one of the students who happens to be his (my host) cousin. The father informed my host that his daughter (niece to my host) informed him of the lecture and they are grateful because the students enjoyed the lecture so much, as narrated by the daughter.

- **Impressions and comments from the accompanying person** (講義補助者の方から、本事業に

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※弊会記入欄

対する意見・感想等がありましたら、お願いいたします。):

Dr. K. Yamasaki also gave a brief lecture (7 minutes) in Japanese to the students where he basically explained some key words associated with my lecture for enhanced understanding. At the end of the lecture, he informed me that the lecture was well delivered and the students really enjoyed it, as evident from how they kept coming to me, to personally ask very interesting questions.