TITLE OF REPORT : Sustainable collaboration between Hiroshima Universities and The Ohio State University, College of Pharmacy, OH, USA

NAME : Harinantenaina Liva Romuald RAKOTONDRAIBE
AFFILIATION : The Ohio State University, College of Pharmacy, Columbus, OH 500W, 12th Ave. Parks Hall, Room 434

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Miyajima



A-Bomb Dome

I arrived in Hiroshima at about 9:45 pm in the evening of December 19th 2017 after two transits (Houston, TX and Narita, Tokyo). My host, Dr. Matsunami who is a Professor of the Graduate School of Biomedical Sciences, School of Pharmaceutical Science of Hiroshima University, picked me up from the bus station and took me to the apartment that have been arranged for me.

I gave a research talk at the School of Pharmaceutical Sciences the next day (Pictured below) to share my results from The Ohio State with the team.



Group picture after my research talk on December 20th 2017.

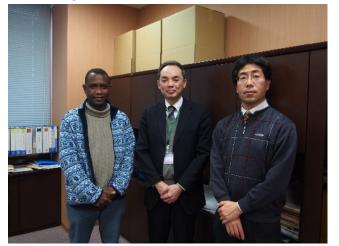
Dr. Matsunami has asked me to help him wrapping up for a publication results of a Master students

that has already graduated (Master). She worked on the phytochemical investigation and biological evaluation of a plant from Okinawa to identify new and bioactive compounds. This activity led to the identification of three (03) new and one (01) known compounds from the plant, one of the compounds displayed antileishmanial activity. Recently we have demonstrated (in my lab) that one compound is cytotoxic against hormone dependent breast cancer (MCF-7) and ovarian cancer (A2780). We are now continuing to gather more data to support the confirmation of the structure of the compounds and to understand their possible biological activity. These results will be presented in the Annual ASP (American Society of Pharmacognosy) meeting in Lexington (KY) in 21-25 July 2018 (<u>http://asp2018.pharmacognosy.us/</u>), and will be published in an internationally recognized scientific journal.

One of the main objectives of this trip was to evaluate the feasibility of and to establish a student exchange program between The Ohio State University, College of Pharmacy and Hiroshima University, School of Pharmaceutical Sciences. With the help of my host, Dr. Matsunami, I could first visited Prof. Dr. Matsuo Hiroaki (松尾裕彰 Ph.D., in the picture) who is the director of the

Department of Pharmaceutical Sciences of Hiroshima University Hospital (薬剤部).

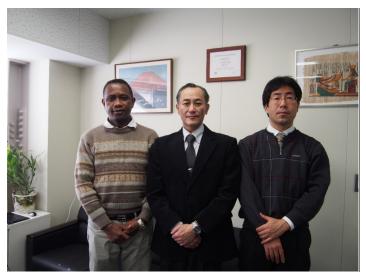
After explaining my plan to him, he described about the exchange programs they already have in place. The department of Pharmaceutical Sciences led by Dr. Matsuo has been working with the University of Tennessee, Mercer University (in GA), and International Medical University of Malaysia. Dr. Matsuo is very positive and very much interested in working with us and expand their exchange program. We drafted an agreement letter that will be discussed and to be signed by the Deans of the two universities. The program will allow 2 to 3 students / year to spend up to ten days to Hiroshima, Japan or to Columbus Ohio, to understand the hospital pharmacy systems in Japan and US and to exchange cultures. The cost also have been discussed and will be finalized after discussing with the dean of each Schools.



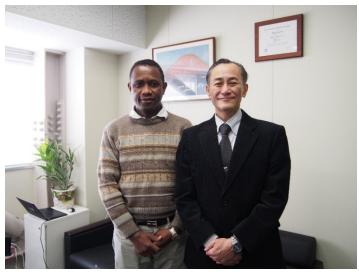
Drs. Liva Rakotondraibe, Hiroaki Matsuo (Center), and Dr. Katsuyoshi Matsunami (Right) during

our discussion in Dr. Matsuo's office.

I also had a chance meet Dr. Takano Mikihisa, dean of the School of Pharmaceutical Sciences of Hiroshima University. He is very supportive on our proposal on the exchange program.



Drs. Liva Rakotondraibe, Mikihisa Takano (Center), and Dr. Katsuyoshi Matsunami (Right) during our discussion in Dr. Takano's office.



Drs. Liva Rakotondraibe, Mikihisa Takano (Center) during our discussion in Dr. Takano's office.

During this trip, I also spent 3 days to visit Prof. Dr. Asakawa Yoshinori of Tokushima Bunri University, who was my postdoctoral advisor (2003-2007). After discussing my proposal with him, he introduced me to the Director of the International Affairs Department, Dr. Takamichi Takahashi (Pictured below). Establishing an exchange program with Tokushima Bunri University will be also included in our plan.



Drs. Rakotondraibe (Left) and Dr. Takamichi of Tokushima Bunri University

My last University visit was the Yasuda Women's University, where Prof Dr. Hideaki Otsuka, my previous Colleague when I was a Faculty at Hiroshima University, School of Pharmaceutical Sciences (2007-2009), is working. He also introduced me to the President for the University (Dr. Toshio Seyama). We were discussing about the continuation of our collaboration on search for bioactive compounds from Madagascan plants.



Drs. Liva Rakotondraibe, Toshio Seyama (President, Center), And Hideaki Otsuka (right) during our visit of Dr. Seyama's office.

Future Direction:

I am now discussing with the Associate Dean for Outreach and Engagement of our College (Dr. Jennifer Rodis, Associate Professor in Clinical Pharmacy) and Dr. Chelsea Pekny, Assistant Professor in Pharmacy Practice for the implementation of the program. After our first meeting (February 5th), we have agreed to explore the opportunity by communicating with Dr. Matsuo and asking him to visit our College when he comes to the United States for a meeting this year.

It was a great opportunity for me to be one of the recipients of Bridge fellowship this year because I could meet my colleagues and "old" students. It was really pleasant to see my students working as faculty members in private universities, hospitals, drug stores in Hiroshima. Some of them may come to my lab in the U.S for a training and exchanges.

Last but not least, I would like to thank the Japan Society for the Promotion of Science Bridge Fellowship for giving me this opportunity. JSPS-Bridge will be acknowledged in all publications related to these activities.