

## Business Trip Report

Date: 24 November 2017

Name – Hokuto Nakata

Affiliation – School of Veterinary Medicine, Hokkaido University / JICA

Destination – Minneapolis, Minnesota, USA

Period – 12 November 2017 to 16 November 2017

Purpose of Trip – To attend SETAC North America 38<sup>th</sup> Annual Meeting

Matters to report – as below;

### 1. Research trend of environmental issue

There was a lot of oral/poster presentations about Neonicotinoid and Mercury. As for the neonicotinoid, recent tendency seems to still continue. However, target animal is changing from honey bee to other bee species or even mammals as known. The reason why Mercury was one of the hottest topic this year is simply that there was ICMGP (13<sup>th</sup> International Conference on Mercury as a Global Pollutant). Even so, it was a great opportunity to learn more and recognize again the toxicity/properties of Mercury. KAMPAI project focuses on Lead pollution, but we should recognize there would be other pollutants in Kabwe area.

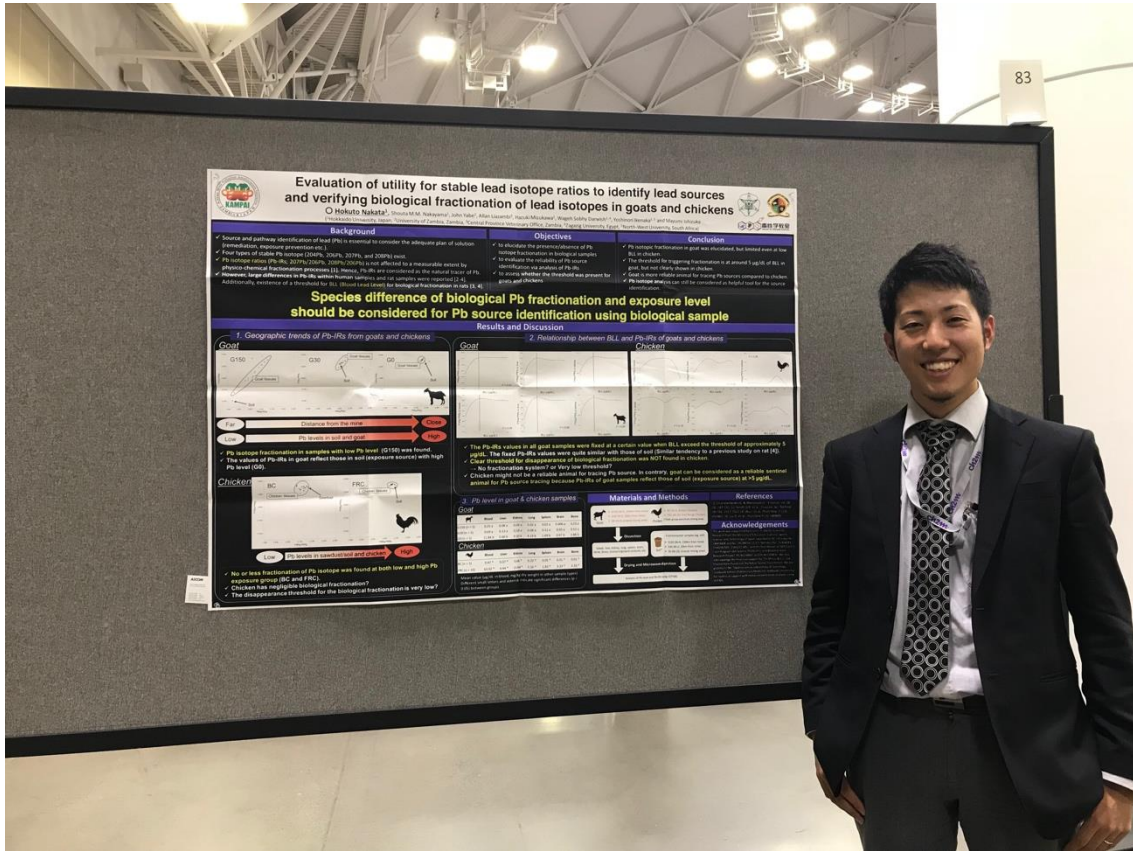
### 2. My poster presentation

The title was “Evaluation of utility for stable lead isotope ratios to identify lead sources and verifying biological fractionation of lead isotopes in goats and chickens”. I fortunately took many questions and comments from the researcher of various fields. Most critical question among them was “How does the biological fractionation of lead isotope occur in the body?”. Many possibilities such as “physically” “chemically” can be considered and there must be various factors. We will try to elucidate this new topic.

### 3. Potential phytoremediation

I found the presentation describing potential phytoremediation of heavy metals using rice straw, sugarcane bagasse maize stalks. It has been already published with the title of “Capability of some agricultural wastes for removing some heavy metals from polluted water stocked in combination with Nile tilapia, *Oreochromis niloticus* (L.)”. We may be

able to utilize the technology in Kabwe.



Picture: Poster presentation on the first day of conference