|                      | 2017. 06, 23                     |
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| Affiliation/Position | Primate Research Institute/D1/L3 |
| Name                 | Josue Alejandro Pastrana         |

## 1. Country/location of visit

Science Seminar House, North Campus, Kyoto University

## 2. Research project

"A Plastic Ocean" screening and discussion (9th Conserv'Session)

## 3. Date (departing from/returning to Japan)

2017. 06. 20 - 2017. 06. 20 (one day)

#### 4. Main host researcher and affiliation

Dr. Jenna Jambeck, Associate Professor, Center for Circular Materials Management, University of Georgia

# 5. Progress and results of your research/activity



During the last Conserv'Session, we saw the movie "A Plastic Ocean", where an international team adventurers, and researchers went on a mission around the globe to uncover the shocking truth about what is truly beneath the surface of oceans. The results were very

astounding, the team captured never-before-seen images of marine life, plastic pollution, and discussed the consequences it has for human health. I was aware that pollution in our environment is an ever increasing problem; however, I was unaware to the extent in which many ways plastic pollution has one of the biggest problems in our oceans. According to the studies presented in the movie, the majority of waste in our bodies of water around the world is consumer plastic, with the biggest culprits are plastic food wrappers, beverage water bottles and caps, plastic bags and cigarette filters, which also contain plastic. The most alarming part to know was that when sun and salt water break down these plastic, the become into smaller particles that are consumed by sea animals and enter our food chain. These micro plastics absorb many chemicals which may include pesticides, oils and many other carcinogenic and generally bad for the human health. They are eaten by smaller fish, which are then consumed by larger ones, and the chemicals that are in these plastics seep into the fat and muscles of the fish we consume. And for those who do not consume sea food, many of the fish products and fish oils are used for land



animals or for plant food, affecting directly the human chain food. The movie also talked about how plastics used for "take out" food leak many chemicals once light or temperature changes, which affect our endocrine system, among many other health issues. For me, the most emotional part of this movie was how birds and sea animals eat these plastic parts, dying in the slowest and most horrendous way.

After the movie, we had a discussion with Dr. Jenna Jambeck, an Associate Professor at University of Georgia and the director in the Center for Circular Materials Management. It was alarming that her team found that there are between 8-12 million tons of this waste, enough to fill 15 plastic bags in every meter of the coastline of the planet. Among many interesting questions and new organizations that are trying to reduce and end pollution in our oceans to the extent seen now, she stresses to 1) avoid drinking



water from plastic bottles, 2) avoid straws or single use plastics, 3) use a reusable bags for shopping, 4) always choose re-usable rather than biodegradable, usually they are not naturally biodegradable, 5) buy in bulk when grocery shopping to avoid small plastic one time uses, 6) and pick up trash when you see it in the ground as it usually ends up in the ocean.

This was a very interesting movie and activity. I would recommend to anybody to see this movie and to attend Conserv' Sessions to learn more about how we can all change the world.