

Advanced Research Scholar – MS Thesis

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Field of Study:
Research Period
US University
US Professor
Research Title

Microbiology
April 2017 – March 2018
North Carolina State University
Dr. Michael Hyman, Dr. Francis de los Reyes
Metagenomic and proteomic analyses of pitcher plant – associated microbiome

Describe your research conducted in the US.

The microbiome associated with pitcher plant liquor is largely an untapped resource for biotechnological purposes. My research aims to characterize the microbial community associated with selected pitcher plant species. I hope to use the results from this research as a platform to further investigate the applicability of the microbial enzymes and other microbial products in agricultural and medical research.

What was the highlight of your research in the US?

The highlight of my research was being able to characterize the microbial community in two different species of pitcher plants which are *Nepenthes alata* from the Philippines and *Sarracenia purpurea* from North Carolina, USA.

In what way has the USAID scholarship changed you?

USAID scholarship opened up an opportunity for me to collaborate with various researchers, professors, and experts in the US. In particular, my host professors have helped me to develop skills in designing a firm stamping strategy to address research questions in most effective ways.

How would you use the knowledge and skills gained through your research to contribute or influence economic growth in the country?

I will be most effective in contributing economic growth in the Philippines as a researcher. I believe that research can provide practical solutions in various issues such as food production, environmental sustainability, and drug discovery will help induce economic growth in the Philippines.

As a young scientist, what do you envision for the Philippine science, technology and innovation ecosystem in the next 10 years?

In the next 10 years, I hope to see more research outputs that will actually materialize and be developed into products. I also hope to see the science and technology ecosystem generate more outputs that will have a direct impact to the community. Moreover, I wish to see that results generated from an experiment will no longer be confined in a laboratory but will be felt by the people.

After returning to the Philippines, Nathan will continue to conduct research in the field of applied and environmental microbiology.