Advanced Research Scholar – PhD Dissertation

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Field of Study:	*Nanomaterials in Biosensing*
Research Period	*November 2014 – October 2015*
US University	*Purdue University*
US Professor	*Dr. Lia Stanciu*
Research Title	*Graphene Nanocomposite based Hypoxanthine Sensor for Assessment of Meat Freshness*
Publication(s)	*http://www.sciencedirect.com/science/article/pii/S0956566316302330*

Describe your research conducted in the US.

The study aimed to advance the means of detecting the freshness or spoiling of meat that would make the evaluation of meat quality faster and easier. The results of the study have potential applications in the food industry, especially in food/meat packaging technology, which will provide consumers a more accurate information on meat quality than estimated expiration dates.

What was the highlight of your research in the US?

Aside from being able to study and test a new biosensing platform, I would consider working with and being mentored by topnotch scientists from diverse cultures as the highlight of my research in the US. To learn under the tutelage of experts who are genuinely interested in helping you reach your goals and grow both professionally and personally is such an amazing experience.

In what way has the USAID scholarship changed you?

USAID scholarship has empowered me to dream higher and embrace a new culture of doing science. It has made me see the possibilities that I can also become a catalyst or a creator of jobs, of innovations, of businesses, and of similar opportunities that USAID has generously provided. As I immerse myself in the very rich, diverse and sometimes complicated world of scientific collaboration, I have become more confident in my abilities to work well with others, and less afraid to start new endeavors myself.

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

Three words – mentor, empower and inspire. I can start with little changes in my own sphere of influence by mentoring young students on the practice of science and technology, empowering them to carve their own scientific pursuits, and hoping to inspire them to do the same to others. I would be running my own lab soon and hope to use the products of my research work in providing solutions to problems in our community.

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

I envision a Philippines that is better at nurturing its own pool of STEM professionals, where 1) products resulted from research or any other scientific endeavor end up somewhere useful other than the shelves of university libraries, 2) an appreciation and practice of a research "culture" is in place, and 3) a vibrant community/partnership of science and technology practitioners in universities and industries exists. Moreover, I hope that STEM professionals, especially scientists, would also take a more active role in policy making and governance to aid the national government in the realization of its plan to vigorously advance science, technology and innovation in the country in the next 20 years.

At present, Jasmine is working at the Technology Diffusion Division, Nuclear Training Center Section of the Department of Science and Technology – Philippine Nuclear Research Institute, where she is managing a small lab to support the Institute's training programs and conduct studies on materials for nuclear technology applications with other researchers.

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