

Advanced Research Scholar – PhD Dissertation

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

Natural Products Chemistry
October 2014 – October 2015
Rutgers, The State University of New Jersey
Dr. James Simon
Phytochemistry, Nutritional Values, Free Radical Scavenging Activities, Pharmacological Properties and Cytotoxicities of Philippine Herbal Vines

Describe your research conducted in the US.

The research that I had conducted in the US aimed at determining the bioactive compounds, nutrient content, and pharmacological properties of eleven (11) Philippine herbal vines, which can be further developed into functional foods that are rich in antioxidants, or into pharmaceutical products that would address degenerative diseases like Alzheimer's.

What was the highlight of your research in the US?

My research work highlights the potential of Philippine herbal vines as rich sources of phytoactive compounds as well as natural antioxidants and may be helpful in the development of pharmaceutical products for the prevention of degenerative diseases caused by oxidative stress. Since these herbal vines are used by the indigenous and marginal communities for the treatment of various diseases, the results could also serve as a baseline data for herbal formulation and development of standardized phytomedicine.

In what way has the USAID scholarship changed you?

Doing my PhD Dissertation research in the US through USAID scholarship was a life changing opportunity. Working in a US University laboratory has offered me strong analytical skills developed through extensive exposure to research work. I realized that Filipino students can compete with the best and can contribute in the field of science and technology here (Philippines) and abroad.

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

I was fortunate to do part of my research at Rutgers University in the United States. I have observed that good mentorship by scientists who really love their work, inspires students to follow their example. I plan to be a good mentor and pass on the love of science to the next generation of scientists. Their work will be a positive influence in the economic growth of our country.

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

I envision many young scientists will have keen interest and become leaders in various fields of science & technology.

At present, Richard or Jake, as he is called, is a Research Consultant and Master Teacher II for Senior High School, Science Technology Engineering and Mathematics (STEM) Education Program of the Gusa Regional Science High School in Region 10-Northern Mindanao.

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