

## Advanced Research Scholar – Grants-related

### Lawrence Vitug

De La Salle University



**Field of Study:**

*Applied Phycology and Biotechnology, Plankton Ecology and Limnology, Microalgae Taxonomy and Phylogeny*

**Research Period**

*March – August 2017*

**US University**

*University of Arizona*

**US Professor**

*Dr. Joel Cuello*

**Research Title**

*Development of Low-Cost Photo-bioreactor for Microalgae Cultivation System*

**Describe your research conducted in the US.**

My research focused on the development of a low-cost cultivation system for optimizing the growth dynamics of a certain microalgae, which is currently explored for its wide range of natural bio compounds with high-value industrial applications such as food, energy, aquaculture and pharmaceuticals. The design and use of innovative and low-cost cultivation systems seeks to contribute to making microalgae production economically successful.

**What was the highlight of your research in the US?**

The research in the US enabled me to develop skills in photo-bioreactor design and cultivation of microalgae on a largescale production. This can help the Philippine algal industry make algal production more economically feasible.

**In what way has the USAID scholarship changed you?**

The USAID scholarship has helped me become more independent, enhance my critical thinking ability, and foster linkages and collaboration with other researchers in my field, which will be helpful in my future endeavors.

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

With skills and knowledge I gained, I can bridge the gap between the academe and industry. I believe that collaboration between the academe and industry is an important factor in creating opportunities for Science and Technology researchers.

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

I envision that the Philippine science, technology and innovation ecosystem will continue to improve. We must encourage and capacitate Science and Technology researchers to do innovative projects so they could contribute in boosting the country's economy.

*Lawrence plans to return to teaching at DLSU and pursue a PhD degree.*

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