

Meet a New ASP Member

In our first issue of 2014, ASP is pleased to welcome many new members to the society. One of our new members is Dr. Shi-Biao Wu, postdoctoral researcher in the laboratory of ASP Newsletter Editor Dr. Edward Kennelly. Dr. Wu related his passion for researching bioactive compounds in foods for the treatment of chronic diseases. We also congratulate Dr. Wu on the recent birth of his son and welcome him to the ASP.

By Dr. Dan Kulakowski

How did you hear about the ASP?

I have known about ASP for quite some time through my PhD supervisor Dr. Jin-Feng Hu and postdoctoral mentor Dr. Kennelly. In 2012, I attended the 8th International Congress on Natural Products Research (ICNPR) joint meeting of ASP and its sister societies and saw the importance and organization of the Society.

Why did you join ASP?

I joined ASP because it is recognized as a premier organization committed to natural products research.

What is your scientific background?

I received my BS degree from China Pharmaceutical University in Nanjing, China. From 2006 to 2011, I was getting my PhD in the lab of Dr. Hu at East China Normal University, Shanghai, China. My doctoral dissertation was about isolation and structure elucidation of new bioactive natural products from seven medicinal plants. Many of these compounds have human health benefits, including anti-tumor and anti-Alzheimer's activity. After receiving my doctorate, I continued postdoctoral training in the United States in Dr. Kennelly's laboratory at the City University of New York, New York, in July, 2011. There, I focused my research on the analysis of food nutritional components for the prevention of chronic human diseases. I have taken part in an NIH-funded grant which focused on plant polyphenols and their benefits for the treatment of chronic obstructive pulmonary disease (COPD).

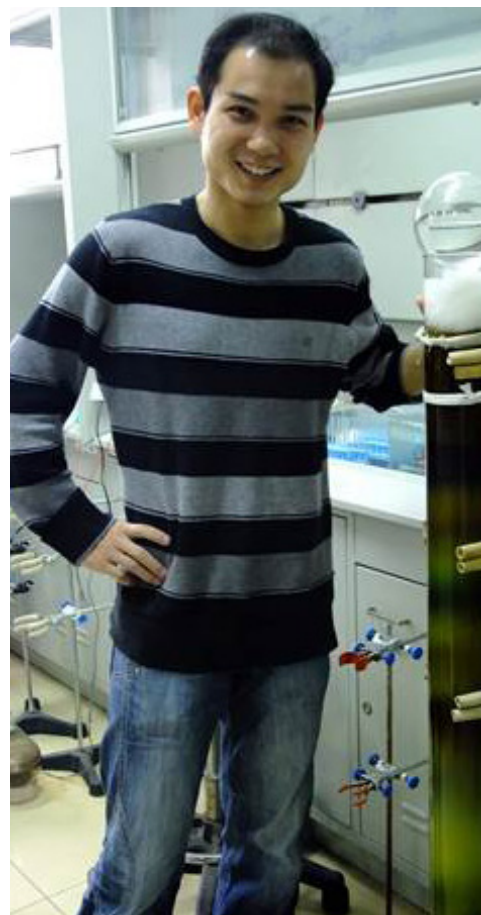
What natural organism most interests you?

Right now, I am interested in the edible fruits and other crops which are beneficial for human health.

What are your current research interests in pharmacognosy?

My current research interests are focused on analysis of food nutritional components for the prevention of chronic human diseases. I have studied the metabolite profile of jaborcaba (*Myrciaria cauliflora*), an edible Brazilian fruit, and found some markers to distinguish jaborcaba and false jaborcaba. The difference between fresh fruit extracts and processed commercial products (e.g. juices, jams, and wine) of edible *Myrciaria* spp. were part of my studies, and I found that some processing techniques may change or degrade bioactive constituents (such as anthocyanins or depsides) in the fruits. My research projects also involved other dark-colored fruit, such as blueberry and cranberry, as well as other vegetables, fruits and crops, including eggplant, bitter melon, guava, guaraná, hops, and their related species and cultivars.

I have also gained expertise combining liquid chromatography-mass spectrometry (LC-MS) analysis with multivariate statistical tools to study secondary metabolites and create and assess hypotheses concerning chemical, morphological, evolutionary, biosynthetic, and health benefits relationships. I have used this strategy to find marker metabolites that contribute to various distinctions in wild eggplant species (*Solanum* spp. including the potato, tomato, and other species), such as phylogenetic sections, New World from Old World, spiny from not spiny, and edible from inedible. In this project, I also established a *Solanum* metabolic database (SMD) for the first time. This database is now available online at ftp://ftp.solgenomics.net/projects/solanum_metabolites and has been integrated into the SolCyc database (<http://solgenomics.net/tools/solcyc/index.pl>).



Dr. Shi-Biao Wu in the laboratory

MR. ZHEN ZHANG

What would you like to achieve through your membership?

As an ASP member, my goals are to expand my scientific interactions with natural product scientists and to be an ambassador of natural products research everywhere.

What do you like doing in your spare time?

My favorite things are music and movies; I also enjoy sharing my spare time with my family, especially my son Michael Wu, born earlier this year. ■