Meet a New ASP Member

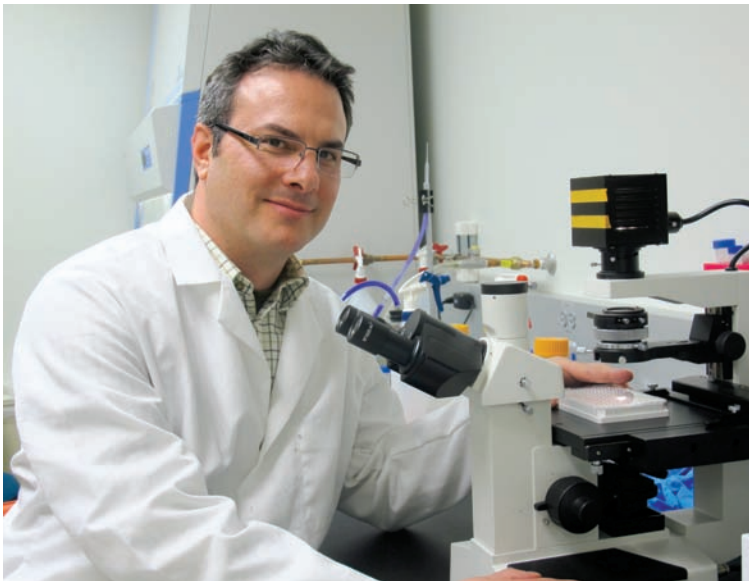
ASP is pleased to welcome a number of new members to the Society this year. One of our new members for 2012 is Dr. Daniel Vincent LaBarbera. He is Assistant Professor in the Department of Pharmaceutical Sciences, The Skaggs School of Pharmacy and Pharmaceutical Sciences, at the University of Colorado Denver, Anschutz Medical Center. We are grateful to him for giving us the opportunity to get more acquainted with him

By Dr. Diane S. Swaffar

How did you hear about the ASP?
I have known about ASP for quite some time through colleagues, the Internet, and other research conferences.

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 B.S. degree in Biochemistry from Arizona State University, Phoenix, Arizona, where I was fortunate to obtain a Howard Hughes Fellowship to conduct undergraduate research in the laboratory of Dr. Edward B. Skibo. I enjoyed my research experience so much that I decided to stay in Dr. Skibo's laboratory for my graduate studies in chemistry. This work focused on the rational drug design of novel antitumor agents based on lead natural products scaffolds, which emphasized the synthesis and mechanism(s) of action studies of both natural and semi-synthetic pharmacophores. As a postdoctoral fellow, my training continued in natural products chemistry at the University of Utah (UU), Salt Lake City, Utah, in the laboratory of ASP member Dr. Chris Ireland, which focused on total synthesis, isolation, and structure elucidation of novel marine natural products. In parallel, I received a National Institutes of Health (NIH) National Research Service Award (NRSA) to conduct multidisciplinary cancer research at the Huntsman Cancer Institute at UU. This diversified training focused on molecular and cancer biology applied to understanding how novel marine antitumor agents modulate specific molecular pathways, leading to programmed cell death both *in vitro* and *in vivo*.



Dr. LaBarbera in his lab observing the uniformity of single 3D-multicellular tumor spheroids cultured in 96-well plates using an inverted phase contrast microscope.

What are your current research interests in pharmacognosy?
My lab is currently funded by the National Eye Institute to discover novel potential therapeutics isolated from the plant *Emblica officinalis,* a.k.a. the Indian gooseberry or the Amla plant, to treat diabetic eye disease. *E. officinalis* has been used in Ayurvedic preparations to treat diabetes and its many secondary complications for thousands of years. This project has been successful due to a collaborative effort with the laboratory of Dr. J. Mark Petrash, Professor of Ophthalmology at our School of Medicine, Anschutz Medical Center. Another major project in my lab, funded by the University of Colorado Cancer Center and the Cancer League of Colorado, is to develop and validate 3D models of metastatic breast cancer that incorporate aspects of the tumor micro-environment (i.e., extracellular matrix) that are suitable for high-throughput drug discovery. Using these models and through collaboration with the laboratory of Dr. Ireland, we have screened a focused library of marine natural products. Consequently, we have confirmed a number of lead compounds that we are developing as potential anti-metastatic agents utilizing rational drug design.

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 other scientific societies do you belong to?
I am a member of the American Chemical Society, American Association for Cancer Research, and the Association for Research in Vision and Ophthalmology (ARVO).

What do you like doing in your spare time?
My favorite thing to do is spend quality time with my family around the house or traveling. Before I became a scientist, I worked in construction, so I spend a lot of time renovating my house. Other hobbies of mine are playing the drums, and more recently I am teaching myself how to play guitar.

QIONG ZHOU