



華美化學與化工學會
Chinese-American Chemical Society
(CACCS)

Chinese-American Chemical Society Event
at
239th American Chemical Society National Meeting
(Spring 2010 ACS Annual Meeting)

Monday, March 22, 2010

Social Hours
5:30 - 6:30 PM

Open to all ACS meeting Attendees (Same location as banquet. Free of charge)

Banquet and Keynote
6:30 - 9:00 PM

Empress of China Restaurant
838 Grant Ave., 5th Floor, San Francisco, CA 94108
Phone: (415) 434-1345
<http://empressofchinasf.com/>

Tickets Available at ACS Registration, \$40/Person

Keynote Speech

From Drug Discovery to Carbohydrate Recognition: A Journey and Lessons Learned

Binghe Wang, Ph.D.

Professor, Medicinal Chemistry
Georgia Research Alliance Eminent Scholar in Drug Discovery
Georgia Cancer Coalition Distinguished Cancer Scientist
Department of Chemistry and Center for Biotechnology and Drug Design
Georgia State University

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Keynote Speech

From Drug Discovery to Carbohydrate Recognition: A Journey and Lessons Learned

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Professor of Medicinal Chemistry, Georgia Research Alliance Eminent Scholar in Drug Discovery, and Georgia Cancer Coalition Distinguished Cancer Scientist

Department of Chemistry and Center for Biotechnology and Drug Design,
Georgia State University, Atlanta, GA 30302-4098, USA

Abstract

As a trained medicinal chemist, the focus of my lab was mostly on drug discovery and drug delivery early on. However, the world of glycomics quickly grabbed our attention. Now carbohydrate recognition work is more than 50% of my lab's focus. Variations of glycosylation patterns in glycoproteins are often indicators of pathological changes. Sensors/binders capable of recognizing differences in glycosylations are potential diagnostics and important research tools in glycobiology. Based on the strong interactions between the boronic acid moiety and hydroxyl groups, we have developed a number of boronic acid-based lectin mimics (boronolectins). This presentation will focus on our recent effort in developing boronolectins for carbohydrate sensing and recognition.

Biography

Binghe Wang graduated from Beijing Medical College (now Peking University Health Sciences Center) with a B.S. degree and received his Ph.D. degree in 1991 in medicinal chemistry from the University of Kansas under the mentorship of Professors Mathias P. Mertes and Kristin Bowman-James. He did postdoctoral work with Professor Victor Hruby of the University of Arizona and Professor Ronald T. Borchardt of the University of Kansas. In 1994, he assumed his first independent position as assistant professor of medicinal chemistry in the College of Pharmacy, University of Oklahoma Health Sciences Center. In 1996, he moved to North Carolina State University, and received tenure in 2000. In 2003, he moved to his current position at Georgia State University as Professor of Chemistry, Georgia Research Alliance Eminent Scholar, and Georgia Cancer Coalition Distinguished Scientist. His major research interests include drug design and delivery, fluorescent sensors, and new diagnostics. Along this line, Dr. Wang is a leading researcher in the world in developing probes that target carbohydrate biomarkers in cancer and other diseases. He has published about 150 papers and co-edited (is editing) five books. He is the chief editor of *Medicinal Research Reviews*, and edits a book series entitled "Wiley Series in Drug Discovery and Development," which has published about 10 volumes.