

September Meeting

The 889th Meeting
of the
Northeastern Section
of the
American Chemical Society



Northeastern Section
American Chemical Society

JOINT MEETING: NORTHEASTERN SECTION, ACS AND MEDICINAL CHEMISTRY GROUP

Symposium

New Developments in Anti-Infective Research

Organized by the Medicinal Chemistry Section
of the Northeastern Section, American Chemical Society

Thursday - September 11th, 2008
Boston College, 2609 Beacon Street, Chestnut Hill, MA.

Afternoon Program: Merkert Chemistry Center, Room 127

- 3.00 pm Refreshments
3.15 pm Welcome
Raj (SB) Rajur, Program Chair, CreaGen Biosciences, Inc. Woburn, MA
3.20 pm Introductory Remarks
Norton Peet, International R&D consultant, North Andover, MA
3.30 pm **Nucleosides and the Challenge of Antivirals: ZSM-I-62 as a Candidate Anti-HCMV drug.**
John Williams, Senior Research Investigator, Microbiotix, Worcester, MA
4:15 pm **Antibacterial Discovery: Past, Present, and Future**
Gregory S. Bisacchi, Associate Director, AstraZeneca R&D Boston
5:00 pm **TBD**
5:45 pm Social Hour, **Murray Function Room, Yawkey Athletics Center, 4th Floor**
6:30 pm Dinner

Evening program: Merkert Chemistry Center, Room 127

- 7:45 pm **Isothiazolopyridones and Isothiazoloquinolones: Discovery of Potent Antibacterial Agents for Treatment of Highly Drug-Resistant Pathogens**
Milind Deshpande, Executive Vice President and Chief Scientific Officer, Achillion Pharmaceuticals, New Haven, CT

Dinner reservations should be made **no later than 12:00 noon on Thursday, September 4th, 2008**. Please contact Marilou Cashman at mcash0953@aol.com or call (800) 872-2054 or (508) 653-6329. Reservations not canceled at least 24 hours in advance must be paid. Anyone who needs handicapped services/transportation, please call a few days in advance so that suitable arrangements can be made. Reservations not canceled at least 24 hours in advance must be paid. **Payment is made at the door by cash or check (no credit cards.) Members, \$28.00; Non-members, \$30.00; Retirees, \$18.00; Students, \$10.00.**

Directions Boston College, Merkert Chemistry Center

Please use map quest to reach Boston College: Merkert Chemistry center is located on 2609 Beacon Street, Chestnut Hill, MA.

THE PUBLIC IS INVITED

John Williams

Nucleosides and the Challenge of Antivirals: ZSM-I-62 as a Candidate Anti-HCMV drug.

Viral diseases provide particular challenges for the medicinal chemist. Because the viruses co-opt many cellular functions, it is difficult to selectively inhibit viral replication while maintaining normal cellular function. ZSM-I-62 represents a novel class of methylenecyclopropane nucleosides that is both highly active against several human herpesviruses, and is also quite non-cytotoxic. The development of ZSM-I-62 as an anti-Human Cytomegalovirus (HCMV) agent will be discussed

Dr. Williams attended the University of Wisconsin-Parkside where he earned a BS in both Biology and Chemistry. Seeking a discipline in which he could integrate both fields, he entered the Medicinal Chemistry program at the University of Michigan under the instruction of Dr. Leroy Townsend and Dr. John Drach, and studied nucleoside antivirals. Upon completing his Ph.D. in 2003, he joined the group of Dr. F. Ivy Carroll at the Research Triangle Institute (RTI), where he contributed to a program investigating drugs of abuse. He then joined Microbiotix in 2005, where he continues working on several antibacterial and antiviral programs.

Gregory S. Bisacchi

“Antibacterial Discovery: Past, Present, and Future”

This talk will cover 1) a brief summary of historical antibacterial agents; 2) discussion, as case studies, of several antibacterial Discovery approaches currently being pursued at AstraZeneca, and 3) a personal reflection on what new or different Discovery approaches might be needed in the future to supply the antibacterial pipeline, especially for gram-negative antibacterial agents.

Greg Bisacchi is Associate Director, Infection Chemistry at AstraZeneca. Greg started his medicinal chemistry career at Squibb in New Jersey, first in natural product based anti-infectives (including monobactams). Later, at Bristol-Myers Squibb, he worked in the areas of antivirals, antidiabetics, and pulmonary and cardiovascular agents. Greg received his BS and PhD in chemistry at UCLA and did a postdoc at Stanford University.

Milind Deshpande

Isothiazolopyridones and Isothiazoloquinolones: Discovery of Potent Antibacterial Agents for Treatment of Highly Drug-Resistant Pathogens

There is a growing unmet medical need for effective treatments of drug resistant bacteria. Ideally, newer drugs will not only cure infections caused by drug-resistant pathogens, but will also prevent emergence of drug resistance. Isothiazolopyridones and isothiazoloquinolones were designed as inhibitors of bacterial enzymes essential for DNA replication. These new classes of anti-bacterial agents display excellent broad spectrum activity. In vitro emergence of resistance to these new antibiotics is also significantly reduced. Microbiology and Chemistry of Isothiazolopyridones and isothiazoloquinolones will be presented

Milind Deshpande joined Achillion in September 2001 as Vice President of Chemistry, was named Head of Drug Discovery in April 2002, Senior Vice President of Drug Discovery in December 2002, Senior Vice President and Chief Scientific Officer in December 2004, and Executive Vice President of Research and Chief Scientific Officer in June 2007.

Prior to joining Achillion, Dr. Deshpande was Associate Director of Lead Discovery and Early Discovery Chemistry at the Pharmaceutical Research Institute at Bristol-Myers Squibb from 1991 to 2001, where he managed the identification of new clinical candidates to treat infectious and neurological diseases. From 1988 to 1991, he held a faculty position at Boston University Medical School. Dr. Deshpande received his Ph.D. in Organic Chemistry from Ohio University, following his undergraduate education in India.
