

## Scientific Program, 2007 Annual ASP Meeting

### Sunday

- 8:30-8:40 Welcome – Stefan Gafner  
8:40-9:00 Welcome – Governor of Maine

### Symposium I Investigations of Commercial Botanicals

Session Chair: Catherine Neto, University of Massachusetts

- 9:00-9:35 S1 Amy Howell, Rutgers University—***Cranberry Proanthocyanidins and Prevention of Bacterial Adhesion***  
9:40-10:15 S2 Jess Reed, University of Wisconsin—***Cranberry Proanthocyanidins and Inflammation***

10:20-10:40 BREAK

10:40-12:00 concurrent sessions (each 4 contributed talks)

#### A. Biosynthesis/Synthesis

Session Chair: Wendy L. Kelly, Georgia Institute of Technology

- 10:40-10:55 O1 Taifo Mahmud, Oregon State University – Mutasynthetic Approaches to Novel Myxalamids  
11:00-11:15 O3 Lukasz Kutrzeba (ASP Student Research Award), University of Mississippi – Biosynthesis of the Hallucinogenic Diterpenoid Salvinorin A Proceeds via the Deoxyxylulose Phosphate Pathway  
11:20-11:35 O5 Mohammed Movassaghi, Massachusetts Institute of Technology - Cascade Reactions in Complex Alkaloid Synthesis  
11:40-11:55 O7 Xiumei Wu, Oregon State University – Biosynthetic Studies of Cetoniacytone A and a Comparative Analysis of the Sugar Phosphate Cyclases Superfamily Involved in Primary and Secondary Metabolism

#### B. Unique Sources/Chemistry (Symposium III)

Session Chair: Kirk Manfredi, University of Northern Iowa

- 10:40-10:55 O2 Charles Cantrell, USDA-ARS, Natural Products Utilization Research Unit – Arthropod Repelling Constituents from a Southern Folk Remedy: Investigations of the American Beautyberry, *Callicarpa americana*  
11:00-11:15 O4 Richard Fitch, Indiana State University – Epiquinamide: A Poison that Wasn't from a Frog That Was  
11:20-11:35 O6 Donald Stierle, Montana Tech of the University of Montana – The Berkeleyamides, a Unique Class of Biologically Active Compounds from an Acid Mine Waste Fungal Extremophile  
11:40-11:55 O8 Anuchit Plubrukarn, Prince of Songkla University - Acetylcholinesterase Inhibitors from Marine Gliding Bacteria

12:00-1:30 lunch on your own (J Nat Prod editorial board lunch mtg)

## Symposium II Marine Toxins

Session Chair: Shawna McKinnon, Institute for Marine Biosciences, National Research Council of Canada

1:30-2:05 S3 Mark Hamann, University of Mississippi—***Structure Determination of the Elusive Pfiesteria-Associated Fish Killing Toxin Using <sup>13</sup>C Enrichment and Cryo-Dual NMR Spectroscopy***

2:10-2:45 S4 Patrizia Ciminiello, University of Naples—***Harmful Algal Events in the Mediterranean Sea: New Toxins and Monitoring Studies***

2:50-3:05 BREAK

3:05-4:25 concurrent sessions (ea 4 contributed talks)

C. Botanicals (Symposium I)

Session Chair: Scott Baggett, BioNovo

3:05-3:20 O9 Sybille Buchwald-Werner, Cognis Deutschland GmbH & Co – *Aloe barbadensis* Preparation as Potential Food Ingredient To Reduce Nutritional Intake

3:25-3:40 O11 Marietta Kaskin-Bettag, Health Research Services Ltd., St. Leon-Rot, Germany – Efficacy and Safety of a Special Extract of *Rheum rhaponticum* (ERr 731<sup>®</sup>) in Perimenopausal Women with Climacteric Complaints

3:45-4:00 O13 Catherine Neto, University of Massachusetts-Dartmouth – Cranberry Phytochemicals: Structure and *in vitro* Anticancer Activities

4:05-4:20 O15 David Y.-W. Lee, McLean Hospital/Harvard Medical School – Alternative Therapies for Drug Abuse

D. Unique Sources/Techniques (Symposium III)

Session Chair: Todd Daviau, Magellan Bioscience

3:05-3:20 O10 Eliane Garo, Sequoia Sciences, Inc. – Capillary Scale NMR Used To Identify Mass-Limited Samples from an Orchid: Advanced Analytical Technology Applied to Plant Families Underrepresented in a Drug Discovery Program

3:25-3:40 O12 John Beck, Western Regional Research Center, USDA-ARS – On-Plant Volatile Analysis Utilizing Solid-Phase Microextraction and a New Volatile Collection Technique

3:45-4:00 O14 Tadeusz Molinski, University of California, San Diego – Marine Natural Products at Nanomole-Scale

4:05-4:20 O16 Gary Martin, Schering-Plough Research Institute – NMR Outside of the Box: Unsymmetrical Indirect Covariance NMR

4:30-6:30 poster session 1

Dinner on your own

Monday

Symposium III Natural Products—Unique Sources, Unique Techniques

Session Chair: Amy Wright, Harbor Branch Oceanographic Institution

- 8:30-9:05 S5 Frank Schroeder, Cornell University—*The Virtue of the Impure: Chemical Biology of Spiders, Worms, and Bacteria Revealed by Direct NMR*
- 9:10-9:45 S6 Coran Watanabe, Texas A&M—*Accessing Marine Natural Products from “Silent” Biosynthetic Pathways*

9:50-10:15 BREAK

10:15-11:55 concurrent sessions (ea 5 contributed talks)

E. Microbial Natural Products

Session Chair: David Rowley, University of Rhode Island

- 10:15-10:30 O17 Dan Sørensen, Merck Frosst Centre for Therapeutic Research – Isolation and Structure Elucidation by LC-MS-SPE/NMR: PR Toxin and Cuspidatol-Related Eremophilane Sesquiterpenes from *Penicillium roqueforti*
- 10:35-10:50 O19 Lori Schmidt, University of Iowa – Six New Polyketide Metabolites from a Fungicolous Isolate of *Acremonium biseptum*
- 10:55-11:10 O21 Hiranthi Jayasuriya, Merck Research Laboratories – Platencin: A Potent Broad Spectrum Antibiotic from *Streptomyces* sp.
- 11:15-11:30 O23 Arlene Sy, University of Iowa – New Cleistanthane and Pimarane Diterpenoids from a Fungicolous Isolate of *Coniothyrium palmarum*
- 11:35-11:50 O25 Harald Gross, Institute for Pharmaceutical Biology, Bonn – Genome-Based Discovery of Secondary Metabolites from *Pseudomonas fluorescens* Pf-5

F. Botanicals (Symposium I) and Unique Techniques (Symposium III)

Session Chair: Ikhlas Khan, University of Mississippi

- 10:15-10:30 O18 K. Brian Killday, Bruker Biospin Corporation – Characterizations of Complex Phenolic-Enriched Extracts from Cranberry and Blueberry: Applications of High Field Multidimensional NMR and HPLC-SPE-MS-NMR Methods
- 10:35-10:50 O20 Michael Tempesta, Phenolics, LLC – Clinical Study of a Standardized Cranberry Extract

F. Marine Toxins and Ecology (Symposium II)

Session Chair: Robert Krueger, Ferris State University

- 10:55-11:10 O22 Sangeetha Subramanian, Institute for Marine Biosciences, National Research Council, Nova Scotia – Screening, Isolation and Characterization of Skin Mucus from North Atlantic Fish Species for Antibacterial Activity

11:15-11:30 O24 Melany Puglisi, Shannon Point Marine Center – Diet Derived Chemical Defenses of the Nudibranch *Armina californica*

11:35-11:50 O26 Tim S Bugni, University of Utah – Marine Natural Products Libraries

11:55-1:30 lunch on your own (Young Members Luncheon)

#### Symposium IV Medicinal Chemistry of Natural Products

Session Chair: John M. Cronan Jr., Magellan Bioscience

1:30-2:05 S7 Thomas Prisinzano, University of Iowa—*Beyond Morphine: Salvia divinorum and the Quest for Novel Opioids*

2:10-2:45 S8 Richard Taylor, Notre Dame University—*Evolution of Polyketide Inhibitors of Eukaryotic Protein Synthesis*

3:00-5:00 poster session 2

5:00 - ? lobsterbake outing

#### Tuesday

#### Symposium IV Medicinal Chemistry of Natural Products

Session Chair: A. Douglas Kinghorn, Ohio State University

8:30-9:05 S9 David Kingston, Virginia Polytechnic and State University—*The Shape of Things To Come: Studies on Taxol and Other Tubulin Binders*

#### Symposium III Natural Products—Unique Sources, Unique Techniques

Session Chair: Gil Belofsky, Efficas, Inc.

9:10-9:45 S10 James B. Gloer, University of Iowa—*Fungi from Underexplored Ecological Groups as Sources of Bioactive Natural Products*

9:50-10:25 S11 Arthur Edison, University of Florida—*NMR Studies of Defensive Secretions from Single Insects*

10:30-10:50 BREAK

#### Symposium I Investigations of Commercial Botanicals

Session Chair: Holly Showalter, Kemin Foods

10:50-11:25 S12 Tieraona Low Dog, University of Arizona—*Women's Health: The Role of Botanical Therapeutics*

#### Special Symposium – *Varro Tyler Prize*

Session Chair: Nicholas Oberlies

11:30-11:45 Presentation of the Varro Tyler Prize by ASP President Roy Okuda and ASP Foundation Board Chair John Cassady

Introduction of Varro Tyler Prize awardee by William Keller

11:45-12:45 A1 Varro Tyler Prize address – Jerry McLaughlin—*Paw Paw and Cancer: Discovery to Clinical Trials*

Remainder of the day FREE – golf tournament, contribute to Maine’s economy, dinner on your own

Wednesday

Symposium V Personal Care Products

Session Chair: Chantal Bergeron, Tom’s of Maine

- 8:30-9:05 S13 Christoph Schempp, University Medical Center in Freiburg—  
***Botanicals in Dermatology - New Developments and Limitations***
- 9:10-9:45 S14 Daniel Maes, Estee Lauder—***From Botanical Extracts to Finished Products - The Bumpy Road of Product Development in the Cosmetic Industry.***
- 9:50-10:20 BREAK

Special Symposium - ***Norman Farnsworth Award***

Session Chair: James McAlpine, Ecopia

- 10:20-10:35 Presentation of the Norman Farnsworth Award by ASP President Roy Okuda and ASP Foundation Board Chair John Cassady  
Introduction of Norman Farnsworth awardee by James McAlpine
- 10:35-11:35 A2 Norman Farnsworth Award address – Les Mitscher—***Co-evolution: Microbes, Mankind and Pharmacognosy***
- 11:35-12:50 lunch on your own
- 12:50-2:50 concurrent sessions (ea 6 contributed talks)

G. Marine Natural Products

Session Chair: Robin Kinnel, Hamilton College

- 12:50-1:05 O27 Masami Ishibashi, Chiba University – Myxomycetes as an Unexplored Resource of Bioactive Natural Products: Isolation of Sponge Alkaloids and Signaling Inhibitors of WNT and Hedgehog Pathways
- 1:10-1:25 O29 Tamara Meragelman, National Cancer Institute – Vulcanamides, a Novel Chemotype from the Bryozoan *Spiralaria spinuligera* that Targets HIF-1 $\alpha$
- 1:30-1:45 O31 Sandeep Jain (Kilmer Prize Award), University of Louisiana at Monroe – Sipholane Triterpenoids: A Novel Class of P-GP Modulators
- 1:50-2:05 O33 Roger Linington (DJ Faulkner Travel Award), Scripps Institution of Oceanography – Mantillamide A: An Exciting Antimalarial Lead Compound from a Panamanian Marine Cyanobacterium
- 2:10-2:25 O35 Wendy Strangman, Scripps Institution of Oceanography – Inhibitors of Pro-Inflammatory Cytokine Production from Marine Bacteria
- 2:30-2:45 O37 Kerry McPhail, Oregon State University – Panamanian Cyanobacterial Lead Compounds with Potential as Anticancer and Anti-parasitic Agents

H. Molecular Targets and Strategies

- Session Chair: John Beutler, National Cancer Institute
- 12:50-1:05 O28 Tawnya McKee, NCI-Frederick – Inhibitors of Hypoxia-Inducible Factor 2-Induced Gene Expression
- 1:10-1:25 O30 Heonjoong Kang, Seoul National University – Ligands of the Peroxisome Proliferator-Activated Receptor Delta as Potential Drug Leads for Treatment of Metabolic Syndrome
- 1:30-1:45 O32 Nicholas Oberlies, Research Triangle Institute – Proteomic Strategies to Identify Anticancer Natural Products with Novel Mechanisms of Action
- 1:50-2:05 O34 Thomas Turbyville, NCI-Frederick – Schweinfurthin A: Mechanistic Studies of a CNS Tumor Cell Line Specific Natural Product
- 2:10-2:25 O36 Marcy Balunas, Ohio State University – Botanical Dietary Supplements as Aromatase Inhibitors
- 2:30-2:45 O38 Dietmar Wolf, AnalytiCon Discovery GmbH – Creation of Pure Natural Products and Semi-Synthetic Natural Product Libraries for Efficient Drug Discovery
- 3:00-5:30 ASP business meeting
- 6:00-7:00 closing reception
- 7:00- ASP annual banquet – Roy Okuda, 2006-2007 ASP President, Master of Ceremonies