14TH ANNUAL SYMPOSIUM Chemical & Pharmaceutical Structure Analysis

Where Technology and Solutions Meet



Science & Technology Coming Together to Make a Difference

October 3–6, 2011 Sheraton Bucks County Langhorne, PA

(())))))))

FINAL PROGRAM

AB SCIEX SelexION[™] Technology

A NEW DIMENSION IN SELECTIVITY



Ion mobility spectrometry for quantitative and qualitative applications

SelexION[™] technology on the AB SCIEX Triple Quad[™] 5500 and QTRAP[®] 5500 systems delivers a new dimension of selectivity and performance for any application requiring the separation of isobaric species, isolation of challenging co-eluting contaminants and reduction of high background noise.

Explore a new dimension at www.absciex.com/selexion





WELCOME

Inspiration. Collaboration.

Dear Colleague:

On behalf of our sponsors and participants, I would like to welcome you to the 14th annual Symposium on Chemical and Pharmaceutical Structure Analysis (CPSA 2011). It is a pleasure to once again host this unique event in Langhorne, PA.

A goal of the CPSA annual meetings is to provide in-depth reviews of innovative technology and industry practices through open discussion of issues and needs. The aim of this annual meeting is to promote the analytical sciences with highly interactive events where scientists openly share their experiences and visions in a collegial setting. Education and specialized training are the foundation of all CPSA events.

At last year's annual meeting, there was a sense of a new beginning when Brad Ackermann of Eli Lilly stated, "We have to move LC-MS closer to the patient before the full impact of what we can do will be realized." Such a new beginning (or challenge!) is emphasized with the CPSA 2011 theme: Science and Technology Coming Together to Make a Difference. Our CPSA 2011 program chair, Roger Hayes of Cetero Research, had a goal to feature sessions that highlight emerging technology within the CPSA environment where ideas are openly shared and observations are discussed. And in many ways, the topics reflected in each symposia session, roundtable, workshop, poster presentation, and short course attempts to move analysis "closer to the patient."

We are once again pleased to provide an expanded line-up of events at CPSA this year in conjunction with the North Jersey ACS Drug Metabolism Discussion Group (NJDMDG), Chromatography Group (NJCG), NMR Discussion Group (NJNMRDG), Mass Spectrometry Discussion Group (NJMSDG), the Greater Boston Mass Spectrometry Discussion Group (GBMSDG), the Delaware Valley Drug Metabolism Discussion Group (DVDMDG), the Chromatography Forum of the Delaware Valley (CFDV), and the Washington Chromatography Discussion Group (WCDG). We are delighted to feature symposia sessions and workshops that provide an intimate setting to expand on the knowledge of recent innovations.

As always, I encourage you to actively participate, interact, and share ideas during the event so that significant impact to the field can be made through your participation in the sciences and your leadership. Key ingredients to CPSA events are creativity and imagination. Please enthusiastically share your ideas and visions for the analytical sciences as we move closer to the patient–and perhaps consumer.

Finally, we are grateful to the sponsors of this unique event. Each sponsor shares the passion and commitment for accelerating product development. CPSA sponsors and participants are dedicated to the spirit of cooperation. Imagination needed!

Sincerely,

Mike S. Lee, Ph.D.



2011 ORGANIZING COMMITTEE

PROGRAM CHAIR

Roger Hayes Cetero Research

SYMPOSIA & ROUNDTABLES

.....

Mark Arnold Bristol-Myers Squibb

Kevin Bateman Merck

Chad Briscoe PRA International

Guodong Chen Bristol-Myers Squibb

Lucinda Cohen Merck

Jerry Gromelski QPS

Jack Henion Advion BioSciences

Jonathan Josephs Bristol-Myers Squibb

Richard King PharmaCadence

Kenneth Lewis OpAns

Timothy Olah Bristol-Myers Squibb

Joanna Pols Merck

Ragu Ramanathan Bristol-Myers Squibb

Petia Shipkova Bristol-Myers Squibb Ron Shoup AIT Bioscience

Gabriella Szekely-Klepser Allergan

Gary Valaskovic New Objective

Eric Woolf Merck

Nathan Yates Merck

VENDOR SESSION Mark Hayward Lundbeck Research

Ragu Ramanathan Bristol-Myers Squibb

POSTER SESSION

James Stephenson Thermo Scientific

Matthew Szapacs GlaxoSmithKline

Tracie Williams Centers for Disease Control & Prevention

Donglu Zhang Bristol-Myers Squibb

SHORT COURSES

.....

Ayman El-Kattan Pfizer

Roger Hayes Cetero Research

Mark Hayward Lundbeck Research

Kenneth Lewis OpAns

Shane Needham Alturas Analytics

Nalini Sadagopan Agilent Technologies

Gary Valaskovic New Objective

Nathan Yates Merck

COMMUNICATION & MEDIA

Carla Marshall-Waggett New Objective

CORRESPONDENCE

Mike Lee Milestone Development Services

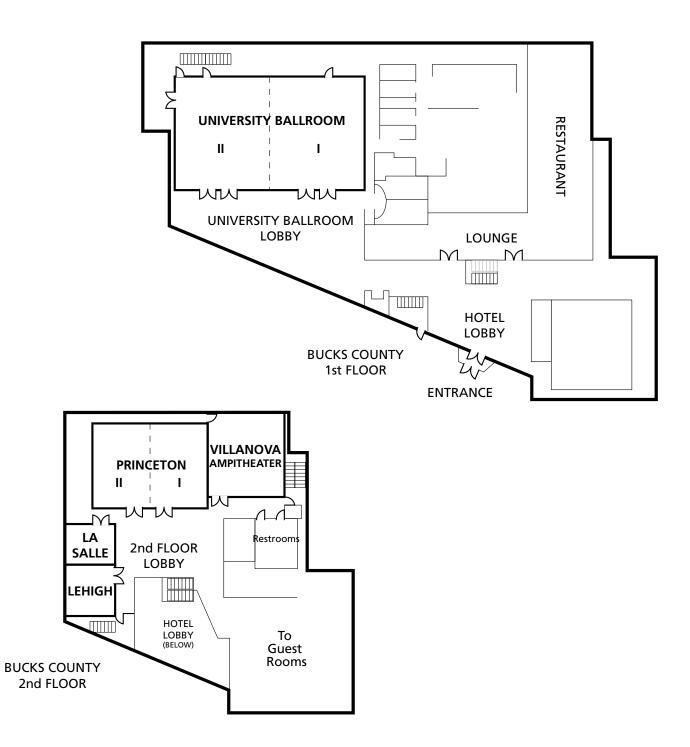
www.cpsa-usa.com

Where Technology and Solutions Meet





Sheraton Bucks County





EXHIBITION

EXHIBITORS

AB SCIEX

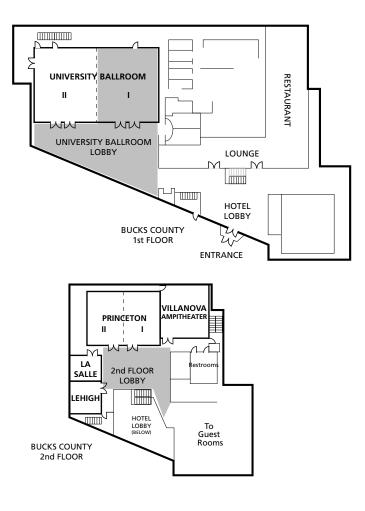
ACD Labs Advion BioSciences Agilent Technologies **AIT Bioscience** Alliance Pharma Alturas Analytics Apricot Designs Biotage Bonna-Agela Technologies Bruker Daltonics **BSD** Robotics **Critical Path Services** Drummond Scientific **ES** Industries GE Healthcare **IONICS Mass Spectrometry Group LEAP** Technologies LECO Corporation MAC-MOD Analytical McKinley Scientific Molecular Discovery MS Mass Spec Consultants mSPEC Group New Objective Novatia OpAns Orochem Technologies PharmaCadence **PRA** International Primera Analytical Solutions Corp. QPS Shimadzu Tandem Labs Vitalea Science Waters Corporation Wiley & Sons

EXHIBIT HOURS

WEDNESDAY 12:00 PM - 2:15 PM 5:30 PM - 6:30 PM

EXHIBIT LOCATIONS

Exhibit booths are located in University I Ballroom, Ballroom Lobby and in the 2nd Floor Lobby.



FOR EXHIBITORS Move-in: Wednesday, 9:00 am - 11:00 am Move-out: Wednesday, 7:00 pm - 11:00 pm



SPONSORS

Thank You!

The CPSA annual symposium is made possible by the broad-based support of industry sponsors. The passion for the analytical sciences and the accelerated discovery and development of pharmaceuticals is shared by each sponsor. As a result, the event is dedicated to promoting awareness and understanding of the issues and needs associated with pharmaceutical R&D in the hopes of inspiring significant advances in the field.





SHORT COURSES & EVENTS

Monday October 3

8:30 AM - 4:00 PM	SHORT COURSES
Princeton I	Method Development for LC/MS: Traditional Approaches and Emerging Trends Instructors: Roger Hayes, Cetero Research; Shane Needham, Alturas Analytics
Lehigh	Small Molecule Biomarkers: Strategies for Method Development, Profiling and High Throughput Workflow Solutions in Drug Discovery Instructors: Mark Hayward, Lundbeck Research; Kenneth Lewis, OpAns
Princeton II	Analysis of Peptides and Proteins: Sample Preparation to Identification to Quantitation Instructors: Nalini Sadagopan, Agilent Technologies; Gary Valaskovic, New Objective; Nathan Yates, Merck
9:00 AM - 3:00 PM	CPSA OPEN GOLF OUTING
	Organizers: Brad Coopersmith, Waters Corporation; Ken Imatani, Agilent Technologies Makefield Highlands Golf Course, Yardley, PA
12:00 PM - 4:00 PM	PHARMACEUTICAL SCIENCES WORKSHOP : IMPURITIES & DEGRADANTS
Villanova	Discussion Leaders: Mingxiang Lin, Merck; Ron Kong, PTC Therapeutics Co-sponsored by the North Jersey Mass Spectrometry Discussion Group
	Characterization of Impurities and Degradants in Biologics Discovery and Development Guodong Chen, Bristol-Myers Squibb
	 Effective Use of LC-MSn Molecular Fingerprinting for the Rapid Structure Identification of Pharmaceutical Impurities Min Li, Merck
	Analytical Challenges in Controlling Genotoxic Impurities David Liu, GlaxoSmithKline
	To Isolate or Not: The Sometimes Circuitous Characterization of a Degradant Gary Martin, Merck
4:30 PM - 5:30 PM	WORKSHOP & SOCIAL
Princeton I & II	Hosted by MAC-MOD Analytical
6:00 PM - 9:00 PM	RECEPTION & SPONSOR'S DINNER
University I & II Ballrooms	Hosted by AB SCIEX
	New Chip to MicroLC Applications
	New Microfluidic cHiPLC Applications for Higher Throughput David Neyer, Eksigent part of AB SCIEX
	 Method Development and Transfer for a Range of Linear Velocities Suitable to Scale Down to 1mm Column IDs and Beyond Rick King, PharmaCadence Analytical Services



Tuesday October 4

7:30 AM - 8:30 AM	REGISTRATION & CONTINENTAL BREAKFAST
	University Ballroom Lobby
7:30 AM - 8:30 AM	SPONSORED BREAKFAST WORKSHOP
Princeton I & II	Electronic Lab Notebook Special Interest Group Sponsored by AIT Bioscience
8:30 AM – 9:00 AM	OPENING REMARKS
University I & II Ballrooms	Welcome Mike Lee, Milestone Development Services
	Objectives, Format, and Opening Remarks Roger Hayes, Cetero Research
9:00 AM - 9:45 AM	PLENARY LECTURE
University I & II Ballrooms	Secrets in Lipid Biochemistry Revealed by Mass Spectrometry Robert Murphy, University of Colorado Denver
10:00 AM - 11:45 AM	PARALLEL SESSIONS

Biomarkers University I Ballroom	Colloquium: The Science of Compliance University II Ballroom
Discussion Leader: Petia Shipkova, Bristol-Myers Squibb	Discussion Leader: Chad Briscoe, PRA International
 Biomarkers for Toxicity Don Robertson, Bristol-Myers Squibb 	 Holy #\$%@! What Have We Gotten Ourselves Into? Ray Farmen, Celerion
 Lipid Analysis in Mitochondria and Serum Using High Resolution LC-MS and HCD Fragmentation Susan Bird, Brigham and Women's Hospital 	 Carryover and Chromatographic Background Contributions: Are We Assessing Potential Bias Effects on Individual Sample Result and/or Batch
 Coupling Static and Kinetic Biomarkers in Order to Unravel Dyslipidemia Stephen Previs, Merck 	 Acceptance in Realistic (and Meaningful) Ways? Rand Jenkins, PPD Pitfalls of Whole Blood Stability and Hemolytic
 LC/MS Biomarker Assay Validation Using Surrogate Matrix and Surrogate Analyte Approaches Gary Schultz, Advion BioSciences 	 Plasma Assessment in Bioanalysis Corey Ohnmacht, PRA International The Role of Compliance in "Non-Regulated" Studies Conducted by the Pharmaceutical Industry Rick Edom, Johnson & Johnson
	 Pre-Compliance in Early in vitro Drug Development Joanna Barbera, XenoTech



Tuesday October 4

12:00 PM – 1:00 PM	SPONSORED LUNCH & ROUNDTABLES
University I & II Ballrooms	Sponsored by Agilent Technologies
1:15 PM – 3:00 PM	POSTER SESSION & ROUNDTABLES
University Ballroom Lobby 2nd Floor Lobby	Discussion Leaders: James Stephenson, Thermo Scientific; Matthew Szapacs, GlaxoSmithKline; Tracie Williams, Centers for Disease Control and Prevention; Donglu Zhang, Bristol-Myers Squibb
2:00 – 3:00 PM	SPONSORED WORKSHOPS
Princeton I	LDTD with SelexION™ Technology and the QTRAP [®] 5500 System with Advanced Selectivity and High Throughput <i>Sponsored by AB SCIEX</i> Yves Leblanc, AB SCIEX
Lehigh	Towards Implementation of MALDI IMS into the Drug Development Workflow: Bridging Histology and Drug Tissue Distributions <i>Sponsored by Bruker Daltonics</i> <i>M. Reid Groseclose, GlaxoSmithKline</i>
Villanova	Metabolism Optimization: Future Needs and Emerging Workflows Sponsored by Molecular Discovery
	Workflows for Efficient Data Acquisition and Processing Kevin Bateman, Merck
	Application of Metabolite Identification Information for Drug Design Roy Vaz, Sanofi-Aventis
	Interactive Demonstration of Software Tools for Acquisition, Processing and Design Ismael Zamora, Molecular Discovery
Princeton II	A QbD-based Approach to LC Method Development Sponsored by Waters Corporation Dominic Moore, Waters Corporation
3:00 PM – 4:30 PM	SYMPOSIA SESSION & ROUNDTABLES
University I Ballroom	Metabolite Identification Discussion Leaders: Joanna Pols, Merck and Ragu Ramanathan, Bristol-Myers Squibb
	Use of High Resolution Mass Spectrometry for Correct Structure Elucidation of Metabolites Natasha Penner, Biogen Idec
	Advances in Metabolite Profiling Software - an Evaluation of Mass-Metasite Diane Grotz, Merck
	Streamlining the Drug Discovery Biotransformation Workflow: HRMS, On-the-Fly-MDF and Metabolite Pilot Software Xiaomei Gu, Bristol-Myers Squibb



Tuesday October 4

	A Comparison of Metabolic Profiles Following Targeted and Non-Targeted Analysis Using Q-Trap Technologies Veronica Zelesky, Pfizer
4:45 PM – 6:15 PM	SYMPOSIA & ROUNDTABLES
University II Ballroom	Innovation in Regulated Bioanalysis: Fact or Fantasy? Discussion Leaders: Kevin Bateman, Merck
	What is Innovation? Kevin Bateman, Merck
	The Case for Innovation in Drug Discovery Bioanalysis Lucinda Cohen, Merck
	The Case for Innovation in Regulated Bioanalysis Chris Evans, GlaxoSmithKline
	Group Argument on Innovation in Bioanalysis All attendees
6:30 PM – 9:00 PM	SPONSOR HOSPITALITY & EVENING WORKSHOPS
	Held in conjunction with the North Jersey ACS Mass Spectrometry and Delaware Valley Drug Metabolism Discussion Groups
University II Ballroom	Beyond Sensitivity: New Solutions for Pharmaceutical Analysis Sponsored by Waters Corporation
	Ignatius Kass, Waters Corporation
University I Ballroom	Dried Blood Spot Summit Sponsored by Alliance Pharma and McKinley Scientific Discussion Leader: Wenkui Li, Novartis
	History, Properties, Issues and Scope of Applications for Filter Paper as a Matrix for Specimen Collection and Analysis W. Harry Hannon (Retired), Centers for Disease Control and Prevention
	New Technologies for the Direct Analysis of Analytes and Enzyme Activities in Dried Blood Spots David Millington, Duke University
	The Dried "X" Spot - Beyond Newborn Screening Donald Chace, Pediatrix Analytical
	DBS Implementation Strategies Olga Kavetskaia, Abbott Labs
	Towards Full Yet Flexible Automation of Dried Blood and Matrix Spot Analysis Shane Needham, Alturas Analytics



WEDNESDAY, OCTOBER 5

PROGRAM AGENDA

Wednesday October 5

7:30 AM – 8:30 AM	REGISTRATION & CONTINENTAL BREAKFAST	
	University Ballroom Lobby	
7:30 AM – 8:30 PM	SPONSORED BREAKFAST WORKSHOP	
Princeton I & II	Isotope Solutions to Address Unmet Analytical Needs Sponsored by Vitalea Science	
8:30 AM – 10:30 AM	SYMPOSIA & ROUNDTABLES	
University II Ballroom	Fast-to-Fail Paradigm Discussion Leaders: Lucinda Cohen, Merck; Tim Olah, Bristol-Myers Squibb	
	 Optimizing the Disposition Characteristics of New Chemical Entities Using HTS ADME Screens Amit Kalgutkar, Pfizer 	
	Biochemical and Assay Screening Using High Throughput Mass Spectrometry Detection Jon Williams, GlaxoSmithKline	
10:45 AM – 12:15 PM	PARALLEL TRACKS	

Microfluidics Princeton I & II	Colloquium: Globalization of Bioanalytical University II Ballroom
Discussion Leaders: Jack Henion, Advion BioSciences; Gary Valaskovic, New Objective; Nathan Yates, Merck	Discussion Leaders: Mark Arnold, Bristol-Myers Squibb; Jerry Gromelski, QPS
 Don't Forget the "LC" in LC-MS/MS Jarrod Marto, Dana-Farber Cancer Institute 	 Pharma Perspective on Globalizing Bioanalysis Ajai Chaudhary, Merck
 Moving Quantitative SRM-MS Toward a Faster Time- Frame: Evaluating Dual Columns and Microfluidic Chips for Peptide Quantification in Plasma Susan Abbatiello, Broad Institute 	 Globalizing Bioanalysis from a CRO Perspective: A Strategic Overview - Advantages and Challenges Jaap Wieling, QPS Global Discontinue of the state o
 Single Molecule Detection and Analysis with Nanostructures Benjamin Cirpriany, Cornell University 	 Global Bioanalysis Consortium: An update of Harmonization Activities Mark Arnold, Bristol-Myers Squibb Immunogenicity Global Guidance Harmonization Speaker TBA

12:00 PM - 2:15 PM

CPSA EXHIBITION OPENS

University I Ballroom University Ballroom Lobby 2nd Floor Lobby Where Technology and Solutions Meet!



Wednesday October 5

12:15 PM – 2:15 PM	LUNCH & LEARN SESSIONS / POSTER SESSION
Princeton I	Business Management and Science in the 21st Century Sponsored by McKinley Scientific Ajai Chaudhary, Merck Paul Corcoran, McKinley Scientific Robyn Rourick, Genentech Shane Needham, Alturas Analytical
Princeton II	Lunch & Learn Session Sponsored by Bruker Daltonics
	Transitioning Qual/Quan Platforms from Small Molecules to Biologics Matt Willetts, Bruker Daltonics
	New Horizons for MALDI-TOF MS: The MALDI Biotyper for Microbial Identification in Pharmaceutical Microbiology Gary Kruppa, Bruker Daltonics
Villanova	High-Performance Nanospray: Techniques & Technologies Sponsored by New Objective
	Efficient Fractionation Strategies for LC-MS/MS in Proteomics Jarrod Marto, Dana-Farber Cancer Institute
	Challenges of Dual-Column Nanospray in Quantitative SRM-MS: Double the Speed or Double the Trouble? Susan Abbatiello, The Broad Institute
	Enabling Nanospray in Triple-Quad Mass Spectrometry Kenneth Lewis, OpAns
Lehigh	Biologics Discovery & Characterization Sponsored by Shimadzu
	Can LC/MS/MS Play a Role in Biologics Development Without Solving the Sample Preparation Issue? Kevin Meyer, Perfinity Biosciences
2:15 PM – 3:30 PM	SYMPOSIA & ROUNDTABLE
	Held in conjunction with the North Jersey ACS Mass Spectrometry and Delaware Valley Drug Metabolism Discussion Groups
University II Ballroom	Does LC/MS/MS Assay Have a Place in Biologics Development? Discussion Leaders: Guodong Chen, Bristol-Myers Squibb; Gabriella Szekely-Klepser, Allergan
	The Rapid Integration of LC-MS-based Bioanalytical Methods to Quantify Protein Therapeutics in Drug Discovery Timothy Olah, Bristol-Myers Squibb



Wednesday October 5

 Challenges and Solutions in the Quantitative Analysis of Large Therapeutic Peptides

Fabio Garofolo, Algorithme Pharma

EXHIBITION & SOCIAL HOUR

► Large Therapeutic Proteins Quantification: The Best of Both Worlds Jaap Wieling, QPS

 3:45 PM – 5:30 PM
 VENDOR SESSION - "5 MINUTES OF FAME"

 Princeton I & II
 Held in conjunction with the North Jersey ACS Mass Spectrometry and Delaware Valley Drug Metabolism Discussion Groups

Session Leaders: Mark Hayward, Lundbeck Research; Ragu Ramanathan, Bristol-Myers Squibb

5:30 PM - 6:30 PM

University Ballroom Lobby 2nd Floor Lobby

Held in conjunction with the North Jersey ACS Mass Spectrometry and Delaware Valley Drug Metabolism Discussion Groups



Obtain attractive McKinley acquisition options on late model equipment from our end of lease inventory. Find autosamplers, mass spectrometers, HPLCs, and more.

Contact us for our latest inventory list.

Your personal asset management team.

The McKinley Scientific team of specialists has over 30 years of experience in biotech equipment leasing and financing. With demonstrated expertise in lifesciences and the biotechnology industry, McKinley's understanding of capital asset-based investing is unparalleled. We can help you manage your equipment assets throughout their entire lifecycle–from acquisition to disposal–by assisting you in selling your surplus equipment, locate needed equipment around the world, and help manage equipment appraisals.

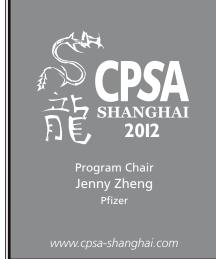
McKinley Scientific **Global Headquarters** 33C Wilson Drive Sparta, NJ 07871 USA +1 973.579.4144 phone +1 973.579.4145 fax www.mckscientific.com





Wednesday October 5

6:30 PM – 7:30 PM	DINNER
University I & II Ballrooms	Held in conjunction with the North Jersey ACS Mass Spectrometry and Delaware Valley Drug Metabolism Discussion Groups
	ANNOUNCEMENTS
	► Food Quality & Safety Summit István Pelczer, Princeton University
	CPSA SHANGHAI 2012 Eric Young, GlaxoSmithKline and Naidong Weng, Johnson & Johnson
7:30 PM – 9:00 PM	KEYNOTE LECTURES & AWARDS
University II Ballroom	Liquid Chromatography-Mass Spectrometry in Pharmacology Research and its Transition to Clinical Applications Ian Blair, University of Pennsylvania
	Distinguished Analytical Scientist Award Presented by Tom Covey, AB SCIEX and Rick King, PharmaCadence
	A Scientific Adventure - LC/MS: From Academia to Entrepreneurship Jack Henion, Advion BioSciences & Cornell University



From Bench to Decision Making From Basics to Application

3rd Annual Shanghai Symposium on Chemical & Pharmaceutical Structure Analysis

Make plans now to attend CPSA Shanghai 2012! This annual meeting is evolving into the premier industry-led event dedicated to promoting awareness of issues and needs associated with global research and development.

Short Courses • Symposia • Roundtables Expo • Workshops • Student Awards

> April 25-27, 2012 Renaissance Shanghai Pudong Hotel

Where Technology and Solutions Meet. Where East Meets West



Thursday October 6

7:30 AM – 8:30 AM	REGISTRATION & CONTINENTAL BREAKFAST	
	2nd Floor Lobby	
8:30 PM - 4:00 PM	SHORT COURSE:	
Villanova	Is Poor Bioavailability in Early Drug Discovery a Problem and If So, How Can We Solve It? Instructor: Ayman El-Kattan, Pfizer	
8:30 AM – 10:00 AM	SYMPOSIA & ROUNDTABLE DISCUSSION	
Princeton I & II	CRO-Innovator Interface Discussion Leaders: Chad Briscoe, PRA International; Ron Shoup, AIT Bioscience; Eric Woolf, Merck	
	 Discovery and Development Bioanalysis Outsourcing: Similarities, Contrast, and Challenges Ajai Chaudhary, Merck 	
	Method Transfer Between Labs: The Challenges and Pitfall Yongdong Zhu, QPS	
	Bioanalytical Offshore Outsourcing - Strategies and Challenges Pat Kadiyala, Bristol-Myers Squibb	
	► Whose SOPs? Ours or Yours? An Open Audience Debate	
10:15 AM –11:45 AM	SYMPOSIA & ROUNDTABLE DISCUSSION	
Princeton I & II	New Technologies Discussion Leaders: Kevin Bateman, Merck and Rick King, PharmaCadence	
	Towards Nanospray for High Throughput Mass Spectrometry Gary Valaskovic, New Objective	
	Exploiting the Orthogonality of Differential Mobility in LC-MS Analysis Yves LeBlanc, AB SCIEX	
	 Cells Instead of Microsomes: Why the HepRG Cell Line is Going to Revolutionize DMPK Screening Tom Rushmore, Life Technologies 	
	The Emerging Role of Zebrafish Embryo Models in Toxicology Jedd Hillegass, Lampire Biological Laboratories	



Thursday October 6

12:00 PM – 1:15 PM	SPONSORED LUNCH & ROUNDTABLES
Princeton I & II	Sponsored by Waters Corporation
	Coupled Workflows Enabled by HRMS: Integrated Data Sets to Facilitate Program Progression Discussion Leader: Jonathan Josephs, Bristol-Myers Squibb
	How Can We Acquire Integrated Datasets? Overview of Qual/Quant: What It Is and What It Is Not. A Specific Example. Kevin Bateman, Merck
	Informatics Considerations for Enabling Global Data Management David Hardy, Waters Corporation
1:30 PM – 3:00	SYMPOSIA & ROUNDTABLES
Princeton I & II	Clinical Diagnostics: From Biology to Analytical Chemistry Discussion Leader: Kenneth Lewis, OpAns
	Early Detection of Biomarkers for Pancreatic Cyst Management Anthony Yeung, Fox Chase Cancer Center
	Strategy, Specimens, Sensitivity, Selectivity and Success in the Development of Clinical Diagnostic Assays Melissa Johnson, Duke University Medical Center
	Life Lessons in a Clinical Diagnostic Lab Bingfang Yue, NMS Labs
3:00 PM – 4:00 PM	CLOSING EVENT
	Sponsored by PharmaCadence
	The Flavorful Chemistry of Chocolate John P. Munafo, Ph.D. Mars Global Chocolate Science and Technology, Hackettstown, NJ USA
	The alluring aroma and complex taste of cocoa is a result of a collection of molecules that we perceive as they interact with our nasal olfactory epithelium and taste receptors in our oral cavity. In addition to its unique flavor, cocoa contains a wealth of phytonutrients known as cocoa flavanols, which are increasingly recognized for their beneficial effect on human health. Due to the complex nature and diversity of these molecules, different arrays of analytical techniques are required for their analysis. This talk will highlight chocolate flavor, the diversity of natural products found in cocoa, and several different analytical techniques used in studying the

THURSDAY, OCTOBER 6

flavorful chemistry of chocolate.



LOCAL AREA DISCUSSION GROUPS

CHROMATOGRAPHY FORUM OF THE DELAWARE VALLEY

www.cfdv.org

DELAWARE VALLEY DRUG METABOLISM DISCUSSION GROUP

GREATER BOSTON MASS SPEC DISCUSSION GROUP
www.gbmsdg.org

NORTH JERSEY CHROMATOGRAPHY GROUP

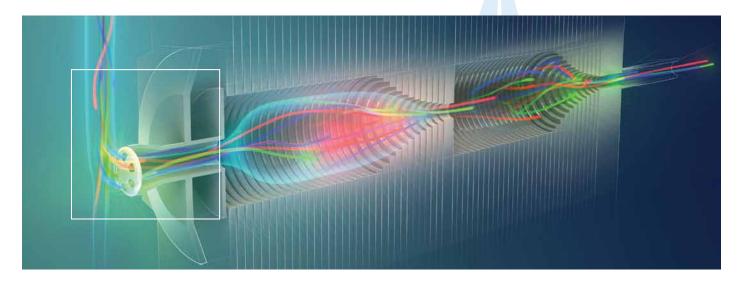
NORTH JERSEY DRUG METABOLISM DISCUSSION GROUP

www.njacs.org/drugmet.html

NORTH JERSEY MASS SPECTROMETRY DISCUSSION GROUP

www.njacs.org/msdg/index.html

CLEARLY BETTER SENSITIVITY



Revolutionary iFunnel technology

Lowest limits of LC/MS detection. Highest levels of sensitivity.

Now standard on the Agilent 6550 iFunnel Q-TOF and 6490 Triple Quadrupole systems

- Ultra trace level quantitation
- Unmatched high sensitivity Qual/Quan
- More confident compound identification using high resolution accurate mass measurements

Learn why iFunnel technology is Clearly Better than anything else available today. Visit www.agilent.com/chem/cbifunnel



© Agilent Technologies, Inc. 2011





Flexibility & Performance



PERFORMANCE

The new PicoChip[™] Nanospray System delivers what you've been asking for-simple operation, emitter/column/voltage integration-without compromising performance or sensitivity.

The industry-proven performance of the PicoFrit® column has been fused into an easy-to-use package that has the critical highvoltage connection already made inside. One quick connection to your pump or valve and you are ready to collect data.

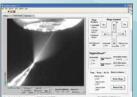


- Digitally-controlled tip positioning
- High-resolution digital imaging •
- Stage position save and recall
- Fully-automated tip rinsing station
- Perform on- and offline analyses •
- <10 nL to >10 µL/min. delivery range

FLEXIBILITY

Digital PicoView[®] pushes nanospray LC-MS to a whole new level. Based on the industry-acclaimed PicoView Source, the tool-free magnetic stage, tip angle flexibility, and unique tip and spray imaging are still there, but now offer even greater control, flexibility and productivity.

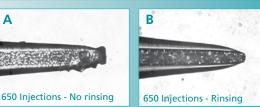
PV Acquire[™] Control Software



High-resolution interactive Quantitative on-screen digital imaging and stage measurement cursors provide positioning controlled from for precise tip positioning and spray optimization

Automated Tip Rinsing

your PC



A standard-spiked plasma sample was analyzed in two separate experiments, each consisting of 650 injections. Photo A is a fritted fused-silica emitter (15µm tip) after 650 injections without tip rinsing. Photo B is also a fritted emitter after 650 injections but with tip rinsing. The rinsed emitter showed no degradation in spray stability, while the non-rinsed emitter had become virtually unusable.



New Objective, Inc. Two Constitution Way Woburn, MA 01801-1023 888 220 2998 Orders 781 933 9560 Phone 781 933 9564 Fax

sales@newobjective.com www.newobjective.com