

3RD ANNUAL SYMPOSIUM

Clinical & Pharmaceutical Solutions through Analysis



Where Technology and Personalized Medicine Meet

MEETING PROGRAM

May 7–8, 2018
Boston Marriott Newton
Newton, MA

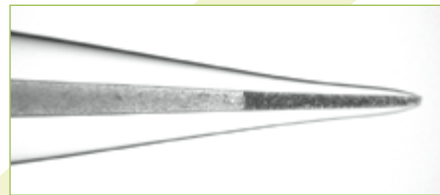
Leaders in Flow Technology™



PicoTIP® NANOSPRAY EMITTERS

1997

The first of the PicoTip® line, the SilicaTip™, was manufactured more than twenty years ago in Cambridge, MA. Crafted with consistent precision, the SilicaTip™ has become the backbone of New Objective innovation and performance.



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1999

Based on SilicaTip reliability, the industry-proven PicoFrit column was introduced in response to our customers' demand for even better performance, reliability, and consistency.

PicoCHIP® NANOSPRAY COLUMNS

2010

Responding again to customer need, the innovative PicoChip was developed. Building on two decades of market-driven innovation, PicoChip is the most reliable, robust, and high-performing sample delivery system available for nano- and micro-flow analysis.



From the first precision-crafted SilicaTip™ more than twenty years ago to the innovative PicoFrit® column and now the revolutionary PicoChip®, our extraordinary attention to detail and uncompromised performance have provided our community with the quality, performance and robustness they have come to rely upon. New Objective continues to lead innovation in flow technology.



Leaders in Flow Technology™

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WELCOME

May 7, 2018

Dear Colleagues:

On behalf of the organizing committee, it is our pleasure to welcome you to the 3rd Annual Analytical Symposium on Clinical and Pharmaceutical Solutions through Analysis (CPSA Analytics). The meeting, along with related events, promises to be both exciting and timely as well as feature lively discussions, memorable interactions, and the sharing of real-world experiences.

The goal of CPSA Analytics is to provide in-depth reviews of innovative technology and emerging practices through open discussion of industry related issues and needs. Our aim is to feature scientific leaders within diversified symposia and sponsored events specially designed to be highly interactive where professionals can openly share their experiences and visions in a collegial setting – where technology and solutions meet!

We are extremely delighted to feature a most wonderful plenary speaker, Donald Chace of Medolac Laboratories. His plenary lecture on “The Birth of MS/MS Screening: How a Single Drop of Blood Can Continue to Revolutionize Clinical Diagnostics” reflects an emerging theme in early detection healthcare – innovation, analytical technology, and patient need. The combination of such diverse interests, issues, and needs will provide unique perspectives, and certainly, continue to inspire significant advances.

The symposium sessions provide a wonderful opportunity to interact with industry leaders as well as openly share experiences – from the laboratory to the patient. Specific issues and needs from previous CPSA annual meetings in the USA, China, Brazil and now Europe will help drive the agenda at CPSA Analytics to feature: 1) focus on patient and patient needs; 2) leadership from the CPSA Charitable Foundation; 3) innovation from the Mozaic Solutions Scientific Advisory Board; 4) integration from the CPSA Four Corners Initiative team; 5) clinical issues/needs from the CPSA Metabolomics Organizing Committee; and 6) pharmaceutical issues/needs from the CPSA USA Organizing Committee.

Our hope is that you will actively participate, interact, and share ideas during the event. Creativity and imagination have been key ingredients to make CPSA meetings a memorable experience all over the world. In this way, a genuine passion for the analytical sciences can lead to personal growth as well as opportunities to significantly impact the field through participation, leadership, and global citizenship.

The hallmark of CPSA Analytics is identical to other CPSA events – belief in a notion that simple actions, simple gestures, along with relationships can bring people together to cooperate in a most transparent and inclusive manner – which when sustained in a coordinated fashion can result in spectacular dreams that are destined to come true. And so, at CPSA Analytics, we dare to attempt to do something great. Together.

Special thanks go to the sponsors of CPSA Analytics. In particular, we wish to thank McKinley Scientific, Mozaic Solutions, and New Objective for giving this meeting life. Thank you! All CPSA sponsors share the passion and commitment for both innovative technologies and the advancement of personalized healthcare.

Enjoy the meeting – where technology and personalized healthcare meet!

Sincerely,

A handwritten signature in black ink, appearing to read "Roy Vaz".

Roy Vaz, Ph.D.
CPSA Analytics Program Chair

A handwritten signature in black ink, appearing to read "Mike S. Lee".

Mike S. Lee, Ph.D.
CPSA Founder

2018 ORGANIZING COMMITTEE

PROGRAM CHAIR

Roy Vaz
Sanofi

SYMPOSIA & SESSIONS

Sue Abbatiello
Thermo Fisher Scientific

Mark Arnold
Covance

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Lorin Bachmann
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Carla Marshall-Waggett
New Objective

Martin Steel
McKinley Scientific

Management & Correspondence

Mike Lee
Milestone Development Services

SPONSORS

Thank You!

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 research and development in the hopes of inspiring significant advances in the field.



MOZAIC SOLUTIONS

Monday May 7

*Boston Marriott Newton
Old Meeting House Room*

SEGMENTED FLOW TECHNOLOGY FOR LIFE SCIENCE RESEARCH

Hosted by Mozaic Solutions

8:30 AM

WELCOME & OPENING REMARKS

Emily Ehrenfeld, Mozaic Solutions

Mike Lee, Mozaic Solutions

All Kloss, Sanofi

9:00 AM

CLINICAL LABORATORY PERSPECTIVES & PROTOCOLS

Chairs: Emily Ehrenfeld, Mozaic Solutions and Roy Vaz, Sanofi

▶ **Newborns Have Grown Up to be Adolescents: The Next Stage of Screening is Here!**

Donald Chace, Medolac Laboratories

▶ **Mass Spectrometry in the Clinical Lab: Quality Management**

Sihe Wang, Cleveland Clinic

12:00 PM

WORKING LUNCH

Chairs: Alla Kloss, Sanofi and Mike Lee, Mozaic Solutions

Harvard Think Tank Update

2:00 PM

PUMP, SAMPLE PREP, AND PLATFORM INTEGRATION

John Janiszewski, Consultant and Mike Lee, Mozaic Solutions

▶ **Big Vessels and Low Flow: How We Simplified Nanoflow LC/MS**

Bernhard Nemec, ProLab

▶ **Dispersive Pipette Extraction: A Novel Chromatography for Automated Liquid Handlers for Purifying Insulin to Antibodies from Serum to Cell Supernatant**

Andrew Lee, IMCS

4:00 PM

NEW TECHNOLOGIES AND METHODS: OPEN DISCUSSION

Chairs: Roy Vaz, Sanofi and Carla Marshall-Waggett, New Objective

▶ **Genomics**

Josh Mann, SOPHiA GENETICS

▶ **Personalized Medicine and ADME Cannot Coexist? Yes, Think Again! Hepatic Impairment as a Case Study**

Ayman El-Kattan, IFM

5:15 PM

CLOSING REMARKS

Emily Ehrenfeld, Mozaic Solutions

Mike Lee, Mozaic Solutions

MONDAY, MAY 7

PROGRAM

Tuesday May 8

*Boston Marriott Newton
Commonwealth 4 Room*

CPSA ANALYTICS WHERE TECHNOLOGY AND PERSONALIZED HEALTHCARE MEET!

7:30 AM - 8:30 AM

REGISTRATION & CONTINENTAL BREAKFAST

8:30 AM - 8:45 AM

WELCOME & OPENING REMARKS

Welcome

Mike Lee, Milestone Development Services

Objectives, Format, and Opening Remarks

Roy Vaz, Sanofi

8:45 AM - 9:30 AM

PLENARY LECTURE

The Birth of MS/MS Screening:
How a Single Drop of Blood Can Continue to Revolutionize Clinical Diagnostics

Donald Chace, Medolac Laboratories

9:45 AM - 11:15 AM

SYMPOSIUM SESSION

Novel Approaches for Profiling Disease: Technology, Methods and Workflows

Discussion Leaders: Roy Vaz, Sanofi

- ▶ High-Throughput Micro-flow Chromatography with Mass Spectrometry for Phenotypic Screening in Drug Discovery and Development
Kristen Randall, Sanofi
- ▶ Quantification of Major Peanut Protein Allergens from Peanut Protein Extracts
Kim Alving, Sanofi
- ▶ Chemoproteomics Strategies to Characterize Covalent Drugs
Jarrod Marto, Dana-Farber Cancer Institute

11:30 AM - 1:30 PM

SYMPOSIUM SESSION / LUNCH ROUNDTABLE

A Morning in Zhongshan Hospital: The Revolution in Clinical Diagnostics Continues

Discussion Leaders: Mike Lee, Milestone Development Services and Emily Ehrenfeld, New Objective

- ▶ Post-Translationally Modified Proteins as Biomarker Target for Clinical MS Tests
Dobrin Nedelkov, Isoformix

TUESDAY, MAY 8

PROGRAM

Tuesday May 8

1:45 PM - 3:00 PM

SYMPOSIUM SESSION

Omic: Genomics to Proteomics to Metabolomics

Discussion Leaders: Ayman El-Kattan, IFM and Emily Ehrenfeld, New Objective

- ▶ **Genomics: A Framework of Personalized Medicine**
Josh Mann, SOPHiA GENETICS
- ▶ **Technology and Methodology: Proteomics and Metabolomics Perspectives**
Alla Kloss, Sanofi
- ▶ **ADME: The Execution of Personalized Medicine**
Ayman El-Kattan, IFM

3:30 PM - 5:00 PM

SYMPOSIUM SESSION

High-Performance Nanoflow and Microflow LC/MS

Discussion Leaders: Amanda Berg, New Objective and Mike Lee, Milestone Development Services

- ▶ **Maximizing Sample Turnover With Microflow LC/MS**
Bernhard Nemec, Prolab
- ▶ **Integrated, Automated Workflows for High Throughput Purification and Downstream Analysis of Biologics**
Andrew Lee, IMCS
- ▶ **LC/MS-based Workflows for Targeted Protein Quantitation in Biopharmaceutical R&D: Automation, Micro and Nano Flow Chromatography, and Integrated Data Analytics**
Dan Spellman, Merck

6:00 PM

CLOSING REMARKS

Roy Vaz, Sanofi
Mike Lee, Milestone Development Services

UPCOMING CPSA EVENTS



5th Annual Symposium on Clinical & Pharmaceutical Solutions through Analysis
**Biopharmaceuticals and Biotechnology for Health:
New Trends, Opportunities, Diagnostics and Beyond**

August 13-15, 2018 • São Paulo, Brazil

Program Co-Chair

Thiago Guia

Bionovis

Symposia • Roundtables • Regulatory Compliance • Analysis Strategies
Technology Integration • Industrial Workflows • Expo • Social Events

www.cpsa-brasil.com

Where Technology and Solutions Meet. Where Together We Progress.



21st Annual Symposium on Clinical & Pharmaceutical Solutions through Analysis
**United to Beat Disease: Partners in Healthcare,
Partners in Science, Partners in Technology and Innovation**

October 15-18, 2018 • Philadelphia, PA USA

Program Chair

Alla Kloss

Sanofi

Plenary Speaker

Florian Eichler

Harvard Medical School

CPSA USA FEATURES

Short Courses • Symposia • Innovators Session • Roundtables Poster Session • Vendor
Session • Exhibition • Workshops • Colloquium Series • Distinguished Analytical Scientist

www.cpsa-usa.com

Where Technology and Solutions Meet

PICTURE YOURSELF AT CPSA!

CPSA Selfies

CPSA Selfies are a great way to share the excitement and fun of this unique event with colleagues, friends and family!

Want to see yourself at CPSA? Here's how...

- Take photos... lots of photos on your phone, tablet, or camera
- Email your photos to CPSAselfies@gmail.com
- Be sure to include a caption and/or the names of everyone in the photos
- Visit the Image Gallery at cpsa-analytics.com to see and share your photos with friends, family and colleagues



CPSA
EUROPE

2nd ANNUAL SYMPOSIUM

Clinical & Pharmaceutical Solutions through Analysis

February 5-8, 2019 • London U.K.

Program Co-Chair

Neil Spooner

*Spooner Bioanalytical
Solutions*

Program Co-Chair

Ismael Zamora

Molecular Discovery

Symposia • Roundtables • Analysis Trends • New Technology
Expo • Mainstream Appliances • Social Events

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Discover the *missing cog* in your global instrumentation and services strategy.

McKinley
S C I E N T I F I C

McKinley Scientific transforms the business of **global outsourcing** in the pharmaceutical and clinical life sciences by providing both standard and customized leasing options as a tool to efficient equipment management.

We use a unique strategy that uses traditional leasing as a vehicle to create access to **cutting edge** instrumentation such as LC/MS/MS, UPLC, HPLC used in research and development, clinical diagnostics and a multitude of industries where high sensitivity, resolution or separation is required for quantitation and equalization.

We have over **35 years of experience** in providing solutions in LC/MS/MS through this asset management approach. Our pre-owned instrumentation is refurbished, tested and recalibrated, delivered and installed to manufacturer specifications and carries a comprehensive warranty.



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S C I E N T I F I C

PERFORMANCE. QUALITY. REPRODUCIBILITY.

"I need a system that runs 24/7..."

With low flow, I don't have to worry about the costs associated with running 24/7." – *Timothy Garrett, University of Florida*



From the first precision-crafted SilicaTip™ twenty years ago to the revolutionary PicoChip®, our customers have been the driving force behind our innovation and commitment to supporting the efforts of those striving to improve human health.

With more than two decades of supplying products that offer real solutions for our community, New Objective continues to redefine simplicity, robustness, reproducibility, quality, and performance.

Find out more at www.newobjective.com



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