Workshop #13: How Am I Suppose To Analyze That?! A Master Class in Sample Preparation
Date: Tuesday October 29, 2024
Time: 1:30-5:30 PM

Rates:

<table>
<thead>
<tr>
<th>MEMBER RATES</th>
<th>NON – MEMBER RATES</th>
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| Early Bird Registration  
June 26 – September 11  
$150 | Late Registration  
Begins September 12  
$175 | On-site Registration  
Begins October 10  
$200 |
| Early Bird Registration  
June 26 – September 11  
$200 | Late Registration  
Begins September 12  
$225 | On-site Registration  
Begins October 10  
$250 |

Chairs
Victor E. Vandell, Ph.D.
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Abstract
The daily life of a toxicologist working in a laboratory environment often involves analyzing antemortem and postmortem samples for the presence of toxins and/or toxicants. Typically, the samples for analysis are complex in matrix composition making them unamenable to direct analysis via gas or liquid chromatography coupled to mass spectrometry. Furthermore, the quality of data collected when analyzing samples in complex matrices is severely compromised if the sample clean-up methodology is not effective. This can lead to the detection of interferences that suppress or enhance your target analyte which could result in the incorrect reporting of testing results and the defiling of your testing instruments. All laboratory toxicologists should have a strong knowledge of sample preparation methodologies that can be applied to all manners of complex matrices submitted for analytical testing. This knowledge however takes years of laboratory testing experience to accumulate. This workshop will offer a Master Class on sample preparation techniques covering matrices ranging from "ok that's not so bad" to "yeah that's yucky" to "ok that's just gross!".

Learning Objectives
1. To teach the participants the actual chemistry of sample preparation in a way that allows them to develop a logical and effective plan for extracting target analytes out of complex matrices.
2. To share real world experiences from scientists who have tackled the challenge successfully analyzed complex matrix samples.
3. To equip participants with a working knowledge of the advantages and disadvantages of various sample preparation technology when devising a plan of attack on a complex sample.

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Audience Knowledge Level
Intermediate- Advanced

Workshop Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
</tr>
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<tbody>
<tr>
<td>1:30 - 2:15 pm</td>
<td>The “Actual” Science of Sample Preparation – Vandell</td>
<td>Victor Vandell</td>
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<tr>
<td>2:15 - 2:40 pm</td>
<td>Oral Fluid Discussion – Handling Buffers and Saliva</td>
<td>Sarah Bartock</td>
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<tr>
<td>Time</td>
<td>Topic</td>
<td>Speaker</td>
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<td>2:40 - 3:05 pm</td>
<td>Blood, Serum, and Plasma Extraction Considerations</td>
<td>Wen Dui</td>
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<td>3:05 - 3:30 pm</td>
<td>Umbilical Cord Discussion – Knot your Average Cord</td>
<td>Simuli Wabuyele</td>
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<td>3:30 - 4:00 pm</td>
<td>Break</td>
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<td>4:00 - 4:25 pm</td>
<td>Brain and Meconium Discussion</td>
<td>Victoria Cheng</td>
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<td>4:25 - 4:50 pm</td>
<td>Postmortem Specimens: Hair, Tissues, and Fluids</td>
<td>Jason Hudson</td>
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<td>4:50 - 5:10 pm</td>
<td>Automation Advancements</td>
<td>Karin Thomassian</td>
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<tr>
<td>5:10 - 5:30 pm</td>
<td>Questions and Practical Knowledge Discussion – All Speakers</td>
<td>All</td>
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