Clinical Chemistry Interest Group Report
70th ASMS Conference on Mass Spectrometry and Allied Topics
Minneapolis, MN

Submitted 6-27-22 by Dr. Candice Z. Ulmer, Co-Chair of the ASMS Clinical Chemistry Interest Group

Title of Workshop: Ensuring QA/QC Through the Harmonization of Microsampling Techniques in Clinical Chemistry Applications

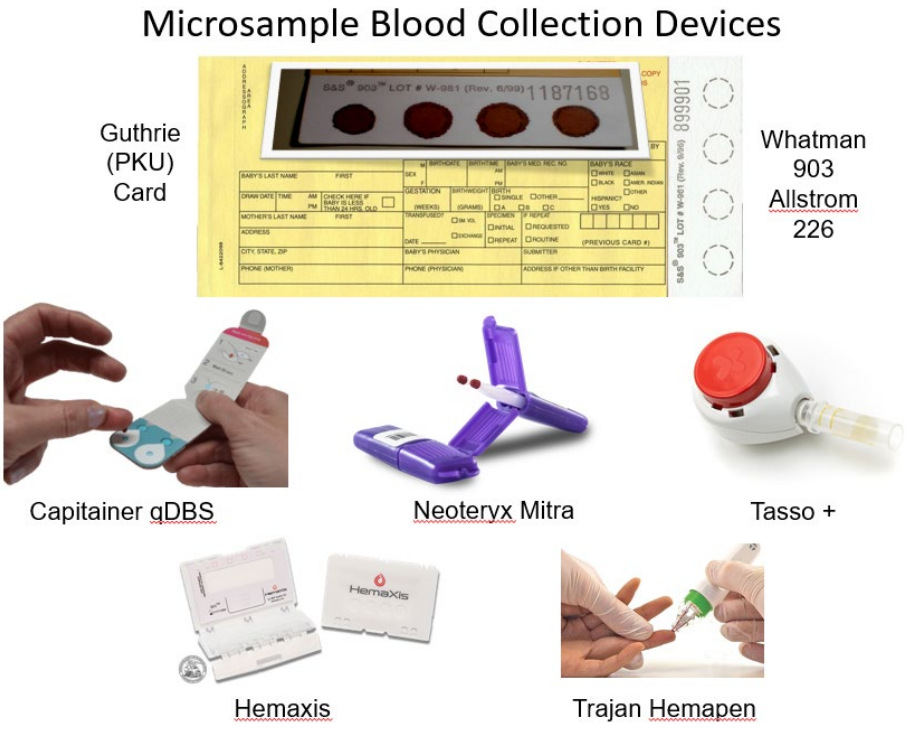
Presenters: Candice Z. Ulmer, Ph.D.
Donald Chace, MSFS, Ph.D., FACB

The above workshop was held in-person on Monday, June 6, 2022, during the evening workshop sessions. The presentation was organized by Dr. Donald Chace. Approximately 25 – 30 people attended the workshop.

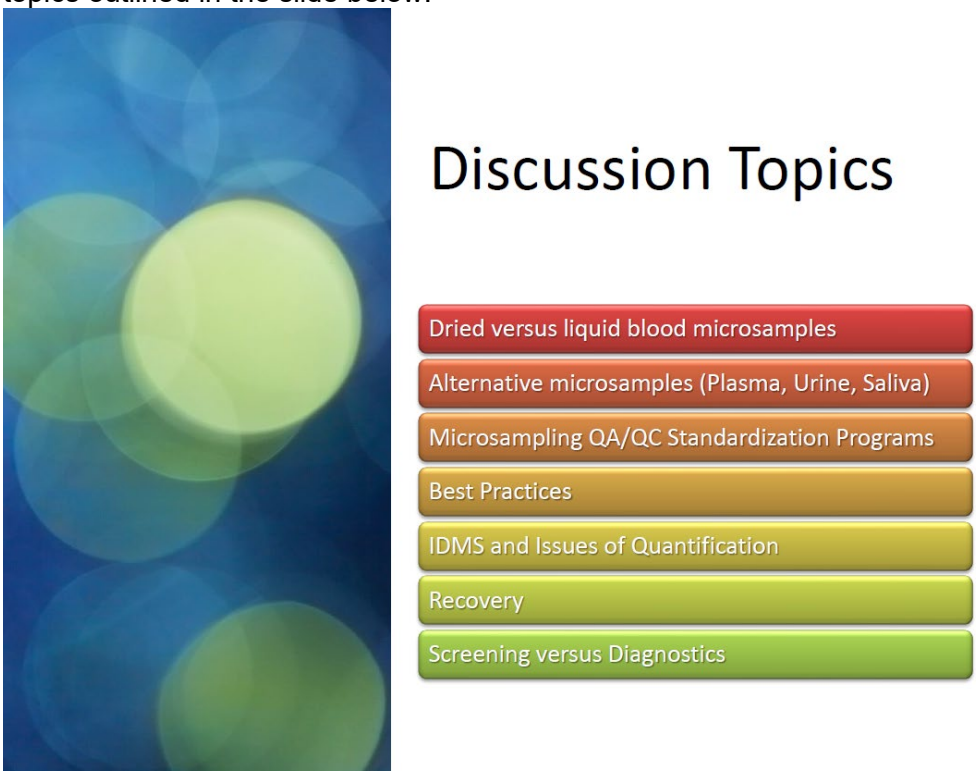
The focus on the workshop was to discuss the following:

- the history of DBS and various matrices used for sampling
- the advantages/disadvantages of microsampling techniques compared to venous blood draws
- new approaches to improving the MS quantification of clinical measurements to make MS analysis more amenable to clinical chemistry applications
- existing microsampling QA/QC standardization programs

An example slide on various types of microsampling blood collection devices is provided below:



The presenters facilitated an extensive and interactive discussion with the audience on the topics outlined in the slide below.



More specifically, for the discussion on existing microsampling QA/QC standardization programs, the presenters highlighted the CDC Newborn Screening Quality Assurance Program (NSQAP) and showed audience members how to navigate the site if there was an interest in participating.

Because the presenters have focused on QA/QC as well as microsampling for the past few years, next year's workshop topic will shift towards the clinical metabolomics scope.