RAPIDLY PAVING THE WAY FOR RAPID DNA – EXPERIENCES OF AN ACCREDITED LABORATORY

<u>Kristen Naughton</u>, Michael Cariola, Erin Sweeney Bode Cellmark Forensics

Rapid DNA describes the fully automated hands-free process of developing a CODIS Core Loci STR profile from a reference sample buccal swab. Rapid DNA instruments are designed specifically for use by law enforcement in remote locations such as booking stations. This "swab in – profile out" technique provides results in just 90 minutes, presenting law enforcement with immediate information to aid in investigative leads.

With the recent passage of the Rapid DNA Act in August 2017, a move towards expanding the ability of law enforcement to implement Rapid DNA analysis technology and profile upload into the federal database has begun. It is clear that the use of Rapid DNA instruments is targeted towards law enforcement agencies, however the degree to which law enforcement can utilize the technology remains unclear amid the lack of guidelines and regulations associated. Policies for this new technology have yet to be instituted, so establishing best practices within the community until then is crucial.

This talk will delve into the changes that Bode, as an ISO 17025 certified laboratory, made to accommodate rapid DNA, including internal validations to support modified Rapid DNA analysis. It will also cover recommendations for law enforcement regarding collection strategies and operation of critical laboratory equipment. Finally, success rates from rapid DNA profiles will be shared. State and local crime laboratories inevitably will face similar inquiries from its customers. This talk provides a useful blueprint for successful adoption of rapid DNA.