

D51 A Better Mouse Trap: A New Technique for the Collection, Preservation, and Examination of Trace Evidence

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Upon completion of this workshop, participants will learn a new method of finding, collecting, preserving, and examining trace evidence using an inexpensive gripping material that is readily available in any local supermarket. Participants will further discover that the use of this gripping material for trace evidence recovery include easy examination options without having to disturb collected evidence; superior gripping ability and ease in handling lifts that include better resiliency and contort-ability; greater collection of materials that may often go undetected; and easy storage of the lifts and little or no damage to the evidence itself.

This new trace evidence collection technique will reduce many of the obstacles faced by investigators in the intricate task of collecting and examining trace evidence. Therefore this presentation will have a substantial impact on both the forensic science community and on jurisprudence as it allows crime scene investigators not only a better way to collect evidence, but it also permits better preservation and examination of the evidence without necessarily having to remove, damage or alter evidence from the collected surface. This in turn will increase the validity, understanding and use of trace evidence presented at trials. Evidence that can be preserved may then be made available for defense experts to examine and for juries to personally view during pertinent testimony. Also, preserved trace evidence lifts that can remain intact on a collected surface and still examined under a microscope and/or by using common digital computer software such as Adobe Photoshop® will permit more sensitive and through examination of recovered trace evidence and provide a time- saving tool for backlogged laboratory examiners.

Trace evidence often consists of very small quantities and/or may be very small in physical size and may be easily overlooked for a number of reasons, including human error, distractions and/or adverse conditions at the crime scene, one or all of which may lead to leaving behind extremely valuable crime scene evidence. This may be particularly true in cases where investigators cannot remain at the scene as long as necessary to complete a thorough search for evidence if for example there are structural or chemical hazards, inclement weather or where there is on-going violence. The already difficult task of finding trace evidence may also be hindered when investigators are processing crime scenes that have dark colored floors, plush carpeting or patterned areas with very busy backgrounds, surfaces that make evidence recovery much harder, particularly on the human eye. This technique not only permits recovery of trace evidence on surfaces such as tiles, carpets, rugs and floors, but it also permits successful recovery on such odd, uneven, textured or irregularly contoured surfaces as loose dirt, stuffed animals, soles of shoes. It may even be employed to successfully remove evidence from paper without tearing it. The technique is nearly identical to that which is used to tape lift fingerprints. Thus, a well trained and experienced investigator does not need to undergo additional training to use this technique, or the material, at crime scenes; it is more a matter of practice.

Trace, Collection, Evidence