Wet-Vacuum DNA Collection Goes Primetime. M-Vac System on cue to help crack the case on the CBS TV-series, CSI: Crime Scene Investigation.

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Bluffdale, Utah, April 24, 2013 – Crime Scene Investigation is the art of meticulously processing a crime scene and requires expert recognition, collection and preservation of forensic evidence. The process often requires investigators who use both superior skills and the latest in science and technology to accomplish the ultimate goal, which is to solve the crime. On the television show *CSI: Crime Scene Investigation*, the team does exactly that – solve the crime – and usually does it in dramatic fashion, which is what has made the show the number one hit series worldwide. In the upcoming episode 21, set to air May 8th, 2013, the investigators will be tapping wet-vacuum DNA collection to help crack a particularly tough case.

During the episode "Ghosts of the Past", investigators will be working diligently to solve a copycat crime at a long abandoned slaughterhouse where a serial killer was shot and killed over 20 years ago after taking seven young lives. Henry Andrews (Jon Wellner), the DNA Lab Tech, uses the most sensitive and scalable DNA collection method available to help solve the mystery: a new, wet-vacuum sampling device called the <u>M-Vac System</u>. Situated in the show's DNA lab, the M-Vac will be used to collect the suspect's DNA from several toys found at a shrine inside the slaughterhouse where three new murders are committed in the same style as the original serial killer. M-Vac will prove to be a crucial element in solving the case of who is committing these new murders.

Fictional as the story may be, both the potential of the scenario and the technology used to solve the crime are a reality. 'The M-Vac System is the cutting edge for DNA collection from porous substrates, large surfaces and where DNA material is scarce," said Wayne Carlsen, Vice President of Engineering and Operations for M-Vac Systems. "It is an excellent tool for collecting forensic DNA material in casework where the traditional methods have either failed or have a minimal chance of collecting enough material to generate a viable profile. It has already been used on a number of active and cold cases and has produced positive results. It isn't the end all cure all, but it is a powerful policework tool that will change the way forensic DNA collection is done."

"There are hundreds of thousands of cold cases in the FBI database, many of them heinous crimes like homicides, rapes and armed assaults" explained Jared Bradley, the President of M-Vac Systems. "Standard collection techniques just do not have the physical agitation and force needed to collect DNA material from the fibers, cracks and crevices of a porous material, especially if there is a minimal amount of the DNA material. If there is DNA on the evidence, the M-Vac has a good chance of collecting it."

In M-Vac collection, a sterile, DNA and RNase free solution is sprayed onto the surface and simultaneously vacuumed, creating a synergy between the two mechanical forces that results in a significantly higher <u>recovery of the DNA material</u>. The solution and the targeted DNA is captured in the collection bottle on the M-Vac, then is concentrated down using one of several available methods that are common in every crime lab.

Key members of the *CSI* team immediately saw its value when they were first introduced to it. Rich Catalani, the Lead Technical Writer and former LASD CSI said "We at *CSI* are very excited to be able to use the M-Vac for collecting DNA evidence. I believe this new technology will greatly benefit us on the show as well as in the real world. It will allow CSIs to collect and process DNA evidence that may be too diffuse for normal collection techniques. We are always looking for new technology to feature on our show. Thanks to the folks at M-Vac and Sheila Thomas, our *CSI* Product Integration."

Also, *CSI*'s director, Brad Tanenbaum, stated, "The M-Vac System turned out to be a crucial crime solving piece of machinery in our story. We were lucky to have it and look forward to solving many more crimes with it in the future!"

The M-Vac System featured on *CSI: Crime Scene Investigation* is being used by a number of Police Department CSIs and crime labs. Several top research universities such as UC Davis, Boston University and others are also conducting validations of the M-Vac collection method versus the traditional methods, with impressive results. In several studies, the M-Vac has collected between 5 and 100 times more DNA material than the swab method.

"Because the M-Vac System operates at such a sensitive level, it may produce a DNA profile that previously might not have been possible," said Bradley. "The M-Vac System won't be needed on every case, but when the scenario is a difficult one, especially on a porous surface, the M-Vac will likely be an effective and appropriate tool."

Established in 2002, M-Vac Systems, Inc. creates, develops, and manufactures both the durable and consumables needed for the patented, wet-vacuum DNA collection method. For more information, contact Jared Bradley, M-Vac Systems, Inc., 14621 S 800 W #100, Bluffdale, Utah 84065; e-mail: <u>forensics@m-vac.com</u>; Web: <u>www.m-vac.com</u>