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Good afternoon Madam Chair, Mr. Chairman and members of the committee. My name is Peter Valentin and I am a detective with the Connecticut State Police. I am here to speak against Bill 6333 in front of the committee today. I am one of five detectives who comprise the Western District van unit and we are responsible for crime scene investigations at homicides, suspicious deaths and other major crimes. We are a resource not only for the state police, but also upon request by a State's Attorney Office, municipal police department or federal law enforcement agency. Our work is vital to the investigation and ultimate prosecution of the most serious crimes in the state and I am proud to be here today as one of only a handful of state police major crime scene investigators. I have the privilege and honor of working with some of the most talented people our agency has to offer the public.

Now even in this small field, my background is unique. I have a Bachelors Degree in forensic science from John Jay College in New York City, a Masters Degree from the University of New Haven in the criminalistics concentration of forensic science and I have begun work on my PhD in forensic science from the City University of New York. I also work as part of a federal forensic team that helps to identify victims in mass casualty incidents such as nine eleven and hurricanes Katrina and Rita. I am a member of the American Academy of Forensic Sciences, the Northeastern Association of Forensic Scientists, and the International Association for Identification. In short, I am a forensic scientist who became a state trooper. The perspective I wish to share with you today I drew from my education and experience as well as my extensive training in crime scene processing and criminal investigations.

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The recent advances in the field of forensic DNA analysis have been nothing short of miraculous. Twenty years ago, we needed a bloodstain the size of a quarter to develop a DNA profile. Today, the amount of cellular material needed has decreased to a level that is the equivalent of only a few cells. These incredible improvements in sensitivity have been referred to as touch DNA because the amount of material needed to get a profile can be transferred from merely touching or breathing on an object. Its implications for the field of forensic science cannot be overstated. It is vital however that this committee recognize that for all help DNA can provide, its value in an investigation only comes from the detectives who give the evidence context.

What should be of concern to the members of the committee is the notion of contamination as referenced in the Statement of Purpose for this bill. Contamination has been defined in the field as the accidental transfer of DNA. With the sensitivity of DNA analysis increasing to previously unimaginable levels, what was previously thought of as contamination should instead be seen as common for an item that existed in an environment where it had contact with other DNA sources. The increasing sensitivity of DNA testing has created the curious situation where the probative value of the DNA profile can be reduced rather than increased because these profiles can be generated from so many items that have been touched by humans.

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For instance, if I encounter this pen as an exhibit at a crime scene, I might seize it and submit it to the forensic laboratory for examination. Meanwhile, we would conduct an investigation that includes victimology, interviews and other investigative tools. Several months from now, I might receive lab results that tell me that I have one or more DNA profiles on the pen but they are unknown since they could not be found in CODIS, the DNA database. It is important for you to understand that the direction of my investigation does not change. If I have identified a suspect, I can obtain a search warrant for his DNA if I have developed probable cause and ask that the laboratory compare it to the unknown profiles on the pen. If I do not have a suspect, I keep working to identify one. An unknown profile has no value to me unless until I identify a suspect to compare it to. With the advances in DNA making it more likely that I will encounter a profile, the value of that profile can be diminished because it could have been left on this pen as the result of very casual contact. More importantly, identifying every source of DNA is not necessary for an investigation.

Proponents of this bill argue that the presence of an unknown DNA profile on an item is a problem for an investigation. I believe this is a fundamental misunderstanding about how we conduct investigations. An investigation does not begin when detectives receive information from the forensic laboratory about analyzed evidence and whether or not they found DNA on an item. Instead, we begin our investigation immediately in order to determine what happened before, during and after the commission of a crime and the presence of an unknown DNA profile, like any other piece of evidence, is only a potential clue. By the time scientific results come back to the investigators, several months have passed.

It is important for this committee to recognize that we use DNA in only a small number of cases with estimates ranging from fifteen to under thirty percent. We solve the overwhelming majority of cases by traditional and very effective investigative techniques. And even in cases where DNA is utilized, it is compared to a suspect that has been developed through traditional investigative techniques and merely confirms what has already been deduced through thorough police work and often, the investigation has already been completed or it is about to be completed because considerable resources have been expended to identify a suspect. The mere presence of an unknown DNA profile does not change the course of an investigation and likewise, the identification of all DNA profiles located at a scene does not end an investigation. This bill attempts to address something that is not a problem to those of us who investigate these crimes because we do not initiate nor direct an investigation from a DNA profile. We do not see its utility.

With DNA advances, we are likely to encounter genetic material on most surfaces. We need to separate the reality of CSI from what we see on television and recognize that the mere presence of that material under most circumstances gives us no indication as to the circumstances under which that material was transferred. An underlying theory in forensics, Locard's Exchange Principle, states that every contact leaves a trace. This theory evolved almost hundred years ago and DNA has demonstrated the wisdom of the theory in ways that no one could have imagined. These scientific advances however require us to reevaluate how we interpret this new information. Even within our own homes, there are literally dozens of profiles that have innocuous origins.

With this in mind, it should become clear that compelling all state and local law enforcement to provide DNA to the forensic lab is an attempt to solve something that has not been identified as a problem by those whose job it is to investigate these crimes. If the goal were identification of all DNA profiles, than perhaps legislation mandating sampling of all arrestees be passed as this would address this issue more completely than the sampling of state and local police investigators. Contamination is not the issue since practically everything we submit to the lab will be contaminated by virtue of its existence in the environment prior to submission to the laboratory. The problem here is the exponential increase in sensitivity of DNA testing without the accompanying change in thinking as to how to evaluate this information. This bill is not the answer.