

Forensically Speaking

Seeking truth and justice through science.

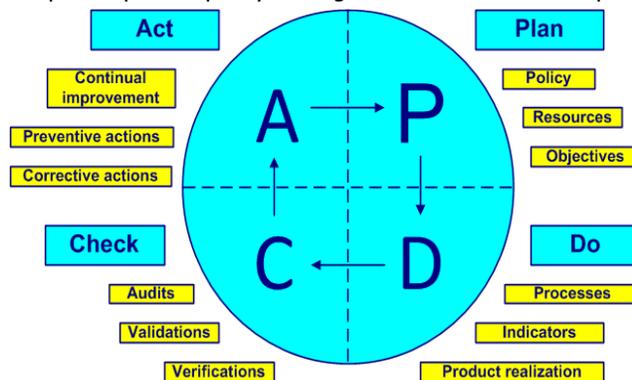
From the Crime Laboratory Director

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The beginning of a NEW YEAR usually means resolutions and change for most people. These changes are what we hope would be improvements. Continuous Improvement is a common theme in any Quality Assurance Program. In these QA programs one will often hear reference to Deming's Wheel or the Shewhart Cycle which is commonly referred to as continuous improvement. Recently, there has been training courses in Kaizen, the Japanese word for improvement.

As we prepare for accreditation, we are constantly engaging in Deming's Wheel: Plan, Do, Check, and Act. It emphasizes and demonstrates how in continuous improvement you must start with careful planning, go through with the process, check it, and then act upon the findings. Each step has specific quality management tools and techniques that can be applied.



Plan what you are trying to improve or do. Assess where you are and where you need to be. Identify potential issues and solutions.

Do try out the plan.

Check to see if the plan had the outcome you hoped for with no negative consequences. Have you accomplished your objective?

Act on what you learned during this cycle. Do you need to go back to planning? Put the controls and procedures in place so you don't have a re-issue. Schedule audits of this policy to make sure it still meets your objective on a larger scale or time.

This procedure will hopefully prevent quick fixes or "knee-jerk" reactions. By jumping to a "solution" one may not have fully identified or addressed the situation, and may in fact have caused future issues.

Let me leave you with the following quote:

"Change is the law of life and those who look only to the past or present are certain to miss the future."

John F. Kennedy

CSI Unit

Some of the most overlooked pieces of evidence at a crime scene are tire and shoe impressions. These impressions are not only the most overlooked but are also one of the most common forms of physical evidence. They come in many forms: snow, mud, dust, blood, etc. They can be two or three dimensional and can also be patent (visible) or latent (not visible to the naked eye) impressions. When properly identified and preserved, these fragile pieces of evidence can play an integral part in linking the suspect to the scene of the crime.

3-Dimensional



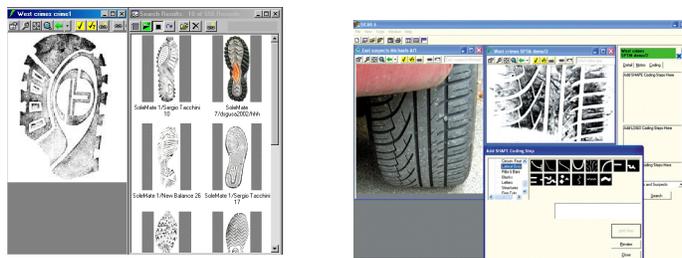
2-Dimensional



Tire and shoe impressions can contain both class and individual characteristics that can aid in determining the source of an impression. For class characteristics, searchable databases exist of known shoe and tire treads. Foster Freeman, a forensics company from the U.K., provides two of these databases: TreadMate and SoleMate.

TreadMate contains information on more than 8,500 vehicle tires and tire tread patterns, including manufacturer, date of market release, pictures and pattern features. SoleMate contains almost 28,000 outsole patterns of shoes. A search of SoleMate can provide the manufacturer, the manufacturer reference for that item, the date of market release of the shoe, and a photo of the top of the shoe to aid recognition. In addition, different manufacturers that produce the same or very similar shoe tread patterns are linked in the database.

To conduct a search of either database, the examiner will assign pattern feature codes to the tread pattern of the impression that was found at the scene. These codes are searched through the database for similarly coded known tread patterns. The search results will provide a list of known tread patterns for the examiner to compare to the impression found at the scene.



Images obtained from Foster Freeman website: <http://www.fosterfreeman.com>

It may be possible to not only determine the manufacturer information, but also identify the *specific* shoe or tire that created the impression. To make an identification, the suspect shoe or tire will first need to be located. Next, a forensic expert will do a side by side comparison of the known and questioned impressions looking beyond their class characteristics and focusing on the unique wear and tear patterns that may be present. If a sufficient amount of unique characteristics are located and consistent in both the known and questioned impression, an identification can be made.

CSI Unit (cont)

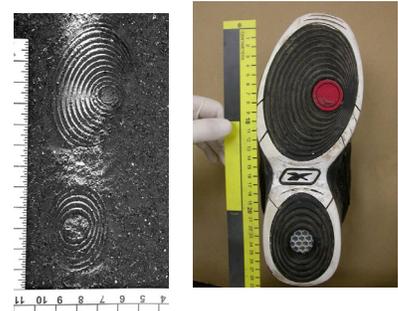
Impression evidence has been valuable in numerous cases throughout the history of forensic science. Below are a couple examples of some local cases where impression evidence played an important role.

Sexual Assault

A woman was brutally assaulted by a man she met at a party on Christmas Eve. The suspect lured the victim from the party and assaulted her in his vehicle. He left the victim in the snow at the edge of the road and drove away. A responding officer took photographs of fresh tire impressions that were left in the snow near where the victim was found. The tire treads of the impressions in the snow were later matched to the tire tread on the suspect's vehicle.

Sexual Assault

A woman was attacked at the back door of her home in Fremont Nebraska as she let her dog outside. She was forced into the house and raped on the couch. The suspect then left, stealing her car. At the scene there were shoe imprints in the mud in the alley behind the house and the back yard. There was also a shoe impression transfer in a greasy substance in the garage where the victim's vehicle had been parked. These impressions were all consistent in the pattern type. A suspect was developed and comparison of the suspect's shoes to the prints resulted in an opinion that they were consistent in regards to class characteristics. This led to further examination. When the suspect's clothes were examined, hairs consistent with both the victim's dog and cat were found on multiple items of his clothing. The clothing also matched the description of what the victim reported the suspect was wearing.



Unfortunately, these valuable forms of physical evidence are often overlooked, not collected, or destroyed. Here are some helpful tips to try to minimize the destruction of this fragile impression evidence:

**Note that the preservation of life always takes precedence over the need to protect physical evidence.*

- Whether in a vehicle or on foot, be cautious when approaching a scene. As you approach, look to see if there are any existing impressions present.
- Before entering a room of a house or business, shine a flashlight at an angle across the floor to reveal any latent shoe prints that may be present.
- Advise the victim or anyone else present of the potential of this type of evidence and try to restrict their movement within the scene
- Use barrier tape to restrict access to the scene. Establish one path to enter and exit the scene that limits the potential of damaging or destroying evidence
- If impression evidence is observed, mark its location. To protect it, put a cardboard box or something that acts as a tent over the impression or post a guard.

CSI Unit (cont)

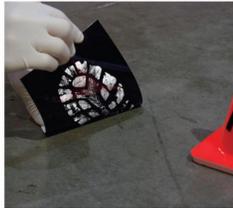
If this type of evidence is properly protected, CSIs can use a variety of techniques and devices to collect and preserve the evidence so that it can be compared to a known source (ex. suspect's shoe) at a later date. Some of these techniques include, but are not limited to, the following:

Oblique/Side Light

Shining a light source at angle to the suspected surface in order to reveal impressions that may not be visible to the naked eye. This technique is very effective on 2-dimensional impressions left in dust or dirt.

Photography

Impressions should always be photographed in case they are damaged during the collection process. Photographs also provide documentation of where the impression was located within the scene.



Powder and Tape

Akin to fingerprint processing, black powder can be used to enhance 2-dimensional impressions and lifted from the surface with clear tape.

Gel Lifts

Gel lifts are sheets of opaque, adhesive material that are used to lift 2-dimensional impressions from nonporous surfaces. Gel lifts are commonly used on doors that have been kicked in by burglars.

Dental Stone Cast

Dental stone is generally used for 3-dimensional impressions. Dental stone is prepared by mixing it with water at the scene. When the consistency is comparably to pancake batter, the mixture is gently poured into the impression. Depending on the temperature, the cast will harden in about 30 minutes, creating a 3-dimensional record of the impression.



Electrostatic Dust Lifter (ESDL)

The ESDL can be used on a variety of surfaces to lift 2-dimensional dust prints. A mylar film is placed over the suspected area. The ESDL sends an electric charge through the mylar film, which causes the dust particles of the impression to transfer from the object to the film. This device is primarily used for shoe impressions.



Chemical Enhancement- Ninhydrin/Amido Black

Impressions in blood can be detected/enhanced with a variety of chemicals. Chemical enhancement can be very useful with bloody impressions on dark colored flooring material (carpet, linoleum, tile, etc.).



Latent Fingerprint Processing

Latent fingerprint processing is a forensic technique that stretches from the crime scene in to the laboratory. There are many techniques that can be used to process and develop latent prints; some can be done both in the lab and in the field while others are specific to one locale. The goal of all latent print development is to improve and maximize the contrast between the substrate (or background) of an item and the latent print itself. This can be accomplished several ways, including the use of digital technology.



At the crime scene, the most common form of latent print processing relies on fingerprint powders, specifically black. Black fingerprint powder is a very universal technique for print development and shows up well on most colored surfaces. A special color of fingerprint powder, called grey-black, will appear darker on lighter colored surfaces and will appear lighter on darker colored surfaces. This process relies on using a fingerprint brush, usually with long bristles, sweeping or twirling a light coating of fingerprint powder over the surface of an object. Certain surfaces present problems with traditional fingerprint powders, especially those with three-dimensional attributes (such as painted or heavily grained wood, extruded aluminum or other metals, or surfaces that are chipped, cracked, textured, etc). These surfaces present situations where the powder may adhere to more than just the latent print 'residue', giving a noisy background.

In the lab, more chemistry is utilized as it is a controlled setting and the environmental conditions can be changed to accommodate specialized processing. For instance, a common chemical process for latent print development on porous items relies on reagents that react with amino acids present in latent print residues. These reagents cause a color change in the presence of specific components of latent print residue and can be photographed and/or enhanced to further improve contrast between the background and latent print. Other reagents form fluorescent compounds that will assist in improving contrast between the background and the latent print. Knowing what colors specific reagents create will assist the latent print examiner in determining which reagent is right for the job. Because lab processing requires the use of specific chemicals, greater care is taken when processing items for latent prints. Some chemicals may have a detrimental effect on the evidence and therefore processing always occurs from least destructive to most destructive. In all cases, every attempt is made to prevent complete destruction of evidence.



The use of digital technology can also allow a latent print examiner the ability to photograph latent prints and perform post-processing enhancement. This can be done by dropping certain colors out of the background or by increasing the contrast of pixels that make up a latent print and dimming the intensity of the pixels that make up the background. Adobe Photoshop is a very common program used to accomplish these tasks. The forensic scientific community has regulated which techniques are acceptable to use for latent print enhancement and those techniques are auditable as part of a built-in feature of Photoshop (called a metadata file). Several approved documents outline which processes

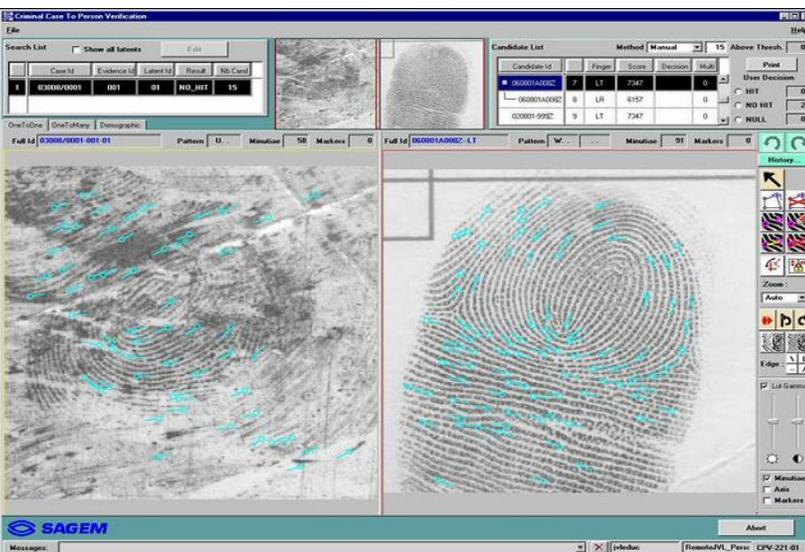
are acceptable and how they should be utilized. This ensures that anyone with the proper training can take the same unprocessed image, perform the same steps the original examiner undertook and get the same, post-processed image.

Latent fingerprint development is the most important technique that can be utilized at crime scenes or on evidence recovered from crime scenes. It is an inexpensive and relatively quick way to identify individuals who handled certain items. As long as the processing steps are documented thoroughly and completed in the correct sequence, latent print development is an effective way to develop evidence

Latent Unit—AFIS and the value of exemplar latents

AFIS, or Automated Fingerprint Identification System, is a computerized database that retains rolled fingerprint impressions (called ten prints) collected from known individuals and latent impressions (called crime scene prints or just latents) collected on evidence. It is a database that, like any storage facility, needs 'cleaned out' from time to time. One way to help reduce the clutter in AFIS is to add only what you need.

At every crime scene where items have been handled, the possibility exists to develop and retain latent prints. Since latents tend to be found on items that are handled (otherwise, how would one wind up there?!), it is a very good possibility that the owner of that item also handled that object. Obtaining the rolled impressions of the victim (s) at the time of scene processing can greatly reduce the 'clutter' that winds up in the AFIS ULF (Unsolved Latent File). This file is where the latent prints are saved for future comparisons to new ten print database entries—



called a latent-to-ten print search, or it can be used to search against newly added latent impressions—called a latent-to-latent search.

Obtaining known impressions from anyone who may have handled the item or object (including police officers) can save time in searching developed latent prints through AFIS. It is the LPU's policy to compare all latent impressions that are of comparison quality to anyone that may have had legitimate contact with that item (owner, family member, friend, and even the first responder) in a side-by-side manner before searching those latents through AFIS, for two reasons.

First, someone who owns the item has a very good reason as to why their prints may be on the item. It is not preferable to add latent prints to the ULF if they belong to a victim. Second, it is much quicker and in most cases, better, to perform a side-by-side comparison than it is to submit a latent for searching through AFIS and see if it will 'hit' on a ten print card. AFIS retains fingerprints utilizing level two detail; it doesn't rely on the old method of classification based on the Henry system, which utilizes level one information, i.e. a latent print can be submitted and encoded with level two detail but no level one information (no pattern type) and still 'hit' on the correct fingerprint. Conversely, it can be entered in to AFIS and even if the owner of the latent print had a card on file, it can still 'miss' being identified.



Latent Unit—AFIS and the value of exemplar latents (cont)

It is far better to perform a side-by-side comparison than it is to submit a latent to the 'cloud' and wait and see if it hits. Things like distortion, deposition pressure, quality of the rolled impression, and quality of the latent print all factor in whether or not a latent print can be identified through AFIS. Providing known fingerprints from the victim(s) not only reduces the processing power of AFIS but it also speeds up the turn-around time of a case as well as omitting victim latent prints from the ULF. We have seen a four-fold increase in the number of identified latent prints when the victim prints are submitted with the case file request. This is largely due to the fact that a lot of latent prints developed at scenes do belong to the victim(s). Even if they say that they haven't touched an item doesn't mean that really haven't touched an item—I've identified latent prints on a vehicle to a victim who swore there's no way those were their prints as they just had their car washed—guess what, they touched the vehicle before realizing that a purse or laptop was missing and just forgot about it during the moment a crime was discovered.



One other way to keep AFIS clutter-free is to periodically go through the database and purge all old cases. We do this by entering the latent prints using a specific alpha-numeric ID; this ID tells us what type of case it is and what year it was developed/entered. When a particular type of case has reached its statute of limitations, those cases can be purged from the system. They can always be re-entered at a later time should the necessity arise but this will also help keep AFIS greased and ready to chug along at top speed. It is a shared system and it is our responsibility to keep it as efficient as possible.

If anyone has any questions about the specifics of how AFIS is utilized/maintained, please contact anyone from the DCSO LPU for more information.

Backlog

As of Jan. 1, 2013, there were a total of 28 cases in backlog

Keeping Costs Down



Over the last few years, many law enforcement agencies have had to cut their operating costs and budgets significantly due to the poor economy. Even though our jobs are funded by taxpayers, we have a responsibility to reduce our

operating costs yet still provide the same great service to Joe and Jane Public. There are several ways to lower operating costs (none of them come without feeling 'the bite') and expenditures; some are more creative than others but no matter what, quality should never suffer. Below are some ways that could help reduce costs yet still provide adequate results (the listed techniques are not necessarily endorsed or used by the DCSO Forensic Services Division—any new technique should be fully validated prior to its use on casework!).

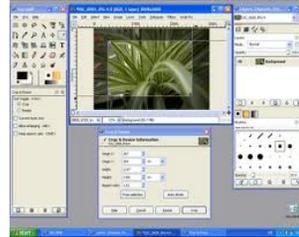
Fingerprint Powders

There are many alternatives to fingerprint powders. The basic premise of how a powder works is its ability to adhere, or 'stick' to moisture left behind from a finger or palm. Basic fingerprint powder is comprised of very small particles of carbon and other powdery residues. Printer toner, a component of laser printers, can be a useful fingerprint powder stand-in. It is comprised of carbon and some polymers that adhere to paper when subjected to high heat (by the imaging drum). Most copier/printers have a used toner cartridge that will fill up over time with unused toner. This unused toner can be used like traditional fingerprint powder if needed. It might not be pure black as color copiers/printers will accumulate unused toner of all colors in the same cartridge.



Photoshop-like Imaging Programs

There are several open-source programs available that have similar or basically identical tools that Photoshop utilizes. GIMP, an open-source program freely available, is very close to the layout of Photoshop.



ImageJ, a program hosted by the National Institute of Justice, utilizes Java to perform numerous image enhancements in an online format.

Smart Phone Apps

There are several apps available on the Android Market or iTunes Store that utilize the GPS and gyroscopic and accelerometer sensors to help with scene reconstruction. These apps can be used to photograph, record distances, angles of impact, etc. Keep in mind, they are using the phone's built-in sensors which aren't designed to handle very intricate measurements but can be used in a pinch for quick analysis.



As always, care should be taken when performing any crime scene-related process. There are several ways to do something but each way should be evaluated prior to its use in casework to ensure its integrity and reproducibility.

First Responder Collection of Video Evidence

If possible, photograph the video equipment. Record any “on-screen” display information and make/model information of the recorder and associated equipment (including number of cameras). Note discrepancies between “on-screen” date-time vs. actual date-time.

Note the color (or tone in a black and white system) and compare the live image on the monitor with the color/tone of the actual objects. Differences will effect descriptions of suspects or vehicles.



Tape Systems – Immediate response cases

- Allow uniformed officers or known subjects to be recorded by the cameras. This provides a visual “book-mark” for locating the incident on playback.
- Eject the videocassette, remove the write-protection tab, re-insert the videocassette and carefully play it ONCE to obtain a description of the suspect. **Never pause a videotape. Severe damage will occur.**
- Always collect the original videocassette. Videocassette copies are unsuitable for laboratory Forensic Video Analysis. Package the videocassette in a paper bag or envelope.
- If additional viewing is needed, have the original videocassette duplicated by the lab and play this “working copy” videocassette for casual viewing.

Tape Systems – No immediate response needed

- Eject the videocassette, remove the write-protection tab, and package the videocassette in a paper bag or envelope.



Digital Systems

- Almost every digital system is going to record the video to a typical looking desktop computer or a Digital Video Recorder (DVR). DVRs often resemble standard VCRs.
- Digital systems will generally allow the video files to be exported to a compact disc or a USB flash drive.
- If you are unable to determine how to export the appropriate video files, ask the manager or the individual or company who installed the system for information on how to export the video and associated viewing software.
- If possible, obtain two (2) copies from the source system. One can be the original and the other can be used as a “working copy” for analysis.
- The media should be packaged in a paper bag or envelope.

Be aware; that since the early 1990's, security system videotapes are usually incompatible with common home VCR's. Severe damage can be caused to tapes by extensively playing or pausing them.

Be aware; that digital systems have no national standards and all systems are different. The viewing systems software must be exported to a disc along with the incident video files.

Be aware; that a critical incident may have been recorded by more than one system (neighboring businesses). Also, perpetrators may have “cased” a business prior to the incident. Collect all of the evidence!

Multimedia

- Recording better video **WILL** solve more crimes -

Generally speaking, advances in technology improve our productivity and the quality of our work. However one area where new technology is often actually reducing the quality of our work is with Closed Circuit Television systems (CCTV) or more commonly referred to as video surveillance systems.

Not too long ago most video surveillance systems used analog cameras and recorded to a good old fashioned VCR (Video Cassette Recorder). Now, I know everyone loves to make fun of the VHS format and especially the BETA format. That is, everyone that does not work with video surveillance on a daily basis. The reason you will not typically hear forensic video analysts knock those older formats is because they usually produced better results than one of the average Digital Video Recorders (DVR) being used today. This is not to say that a DVR is not capable of producing similar image quality as video recorded to a VHS tape. The issues usually stem from people pushing their DVR systems to the extreme.



Several advantages of a DVR system over a traditional analog system

- Continues recording – No need to change tapes...ever
- Easy review – The ability to review recorded video while the system continues to record
- Networking capabilities – Review video over the internet from anywhere in the world
- Fast search – Being able to instantly search for a specific date and/or time

Probably the most common area where people stretch the limits of their DVR systems is with stored video. DVR systems record video to a Hard Disk Drive (HDD), the same type of drive that is in a desktop computer. In order to store more video, people will adjust the DVR record settings to the highest video compression levels, lowest resolutions, and image frame rates that are way too low. Depending on the size of HDD installed, these settings can allow the DVR to store recorded video for a month or even up to six months. The result is poor image quality in exchange for more archived video.

So how do we get better video? The owners of digital systems need to be educated on the benefits of increasing the video resolution, lowering the video compression, and setting an appropriate frame rate. Now, since there are a seemingly infinite number of DVR manufactures producing systems today, each with their own little twist on how they think a DVR should run, the best way to help the DVR owner is to personally assist them in adjusting their DVR settings.



Things to consider when adjusting DVR record settings

- What is the goal of the recorded video for each camera? Do you want to be able to identify individuals or just see when people are in the room
- Does each camera need to be recorded all of the time or could motion detection be used on certain cameras installed simply for monitoring
- What are the storage capabilities of the system? Installing a larger HDD might be required in order to achieve the proper record settings
- Know and understand the limitations of the system.

Knowing the answers to these questions will help determine if a frame rate of 3 frames per second is acceptable or if certain cameras should be increased to 15 frames per second. Also, should each camera be recorded at a resolution of 320x240 or 704x480? Typically, adjusting the DVR record settings to the highest video resolution, lowest compression, and highest frame rate will produce the highest quality video. However this is not always necessary. The settings should be adjusted to meet each camera's goals.

Obviously there are several other variables involved with increasing the quality of surveillance video – camera quality, camera location, quality of wiring, ... Working with what the owner has is definitely the first step. If adjusting their current equipment does not work, then replacing equipment might be necessary. Just like a musician blaming the instrument, most digital video systems are capable of much more if the people maintaining them understand how to properly use them.

Chemistry Unit – Why didn't they test everything I submitted?

In the chemistry unit, it is common to receive cases that contain either many samples or a large amount of drugs. While that relates to job security for those of us working these cases, it also brings up a topic that could use some discussion; when items are submitted to the crime lab does the analyst have to test everything that was submitted? The answer is no, the analyst uses sample selection to determine what item(s) to test.

Sampling or sample selection is something that we do every day in the chemistry unit. If we were to test every package of suspected drugs that was submitted for a case there would be an unacceptably low number of cases getting completed. Consider a recent case that contained hundreds of packages of synthetic cannabinoids!



So how do we decide what to test, and what can our customers expect to see in the lab report in regards to sample selection? Well the decision is often made based on the probative value of the evidence and the needs of the customer.

A very common way that we select the number of samples to be tested is called "charge threshold sampling". Nebraska State Statute 28-416 (6) lists several types of drugs and the charges related to possession of differing amounts.

For instance, in cases containing large amounts of marijuana, the state statute lists the highest penalty, a Class IV felony, for amounts greater than or equal to 1 pound. Therefore, the analyst may decide not to test all of the items submitted, but to randomly select enough items for testing to be just over this charge threshold of 1 pound. The remaining items would be weighed and inventoried, but not tested as there is no probative value for doing so.



For most drugs, the exceptions being marijuana, heroin, amphetamines and cocaine, the charge is **not** based on the amount of drug at all – just possession of any mixture or substance containing a detectable amount. In this situation the analyst will sample at their discretion, based on their assessment of the evidence, the customer's needs, and lab policies and procedures. For example:

Let's say that a case was submitted that contains five suspected ecstasy tablets, all with the same appearance. The analyst may only test and report the contents of one tablet as unless PWID can be shown; there is no more charge for possessing five tablets than one tablet. If on the other hand, there were twenty tablets and the charge involved intent to deliver, the analyst would be testing many more than one tablet as applicable to the case.

Now that we have shared how sample selection allows the lab to complete more cases in a short amount of time, let's discuss the issues with a few common sample items so you can be aware of how the results may affect your case(s).

Chemistry Unit – Why didn't they test everything I submitted? (cont)

Syringes:

Probably the most common submitted items that are often not tested are used syringes. It is our lab policy not to require the analyst to test syringes if there are other drugs in the case. This is to avoid the unnecessary danger to the analyst of handling used syringes for a low probative value item. Syringes will be tested in cases where the syringe is the only evidence, or upon special request.

Paraphernalia/Residue:

Cases with paraphernalia or other residue-only items can be problematic for the lab due to the small amount of sample present. The submitting officer may want to consider not consuming any sample for a presumptive test and/or checking if visible residue is present before submitting to the lab, as negative results may have a detrimental impact on the case. Although the instruments that we use for drug testing are very sensitive, the analyst must have enough residue present to reach a certain threshold or they may not be able to positively identify the substance. An item should have easily noticeable residue for the best results. For this reason and especially when solid dose drugs are also submitted in the case, paraphernalia and other residue items will be selected for testing on a case-by-case basis.



So is there anything else that we can share that will help you understand how to help us make the most of our time in the lab and get you results more quickly?

Well there is one thing; any items that are submitted must be examined, described and inventoried by the analyst even if they are not tested. To be efficient in our turn-around-time, we would appreciate it if only items that require testing are submitted.

As always, we invite our customers to let us know if they have a need that falls outside of the "normal" way in which we sample drug items. We are always willing to work with our customers on a case-by-case basis. Thank you and until next time!

Link to Nebraska Drug Penalties:

<http://nebraskalegislature.gov/laws/statutes.php?statute=28-416>

Backlog

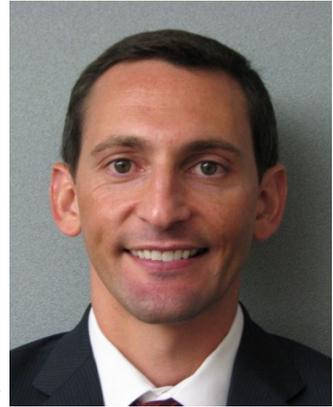
As of the beginning of this year, the Chemistry Unit has a backlog of 63 cases, down from a 93 case backlog in October, and an average turn-around time of 38 days.

New Hire for Douglas County Forensic Services:

Robert Justin Aumann (Justin) CSI Field Supervisor

Justin is a native of Florida, but was raised in a small town in Ohio. Growing up near Columbus, he is an avid Ohio State Buckeye fan who is excited about returning to Big Ten country. Justin enjoys the outdoors, staying fit, and doing landscape photography.

Since 2002, Justin has worked in various roles for local, state, and federal law enforcement. He received a Master's degree in Criminal Justice from the University of Central Florida and is currently certified as a latent print examiner and a crime scene analyst. He is a member of the International Association for Identification and has served as the Chair of the Crime Scene Certification Committee for the Chesapeake Bay Division for several years.



Justin is looking forward to joining the Douglas County Sheriff's Office as the Field Supervisor of the Crime Scene Unit. He is eager to lead the CSI's in providing the most effective and efficient crime scene service to the residents of Douglas County.

Employee Spotlight—Mike Krohn



Mike has been employed by the Douglas County Sheriff as a Crime Scene Investigator for five years, and it has proved to be the most challenging and rewarding job that he has ever had.

Mike earned a Bachelor of Fine Arts Degree in Commercial Art from Concordia University in Seward, NE in 1996. After approximately 8 1/2 years in the sign business (designing and installing signs) and almost three years part time in radio, he made a very important decision to change careers, and in 2005 earned a professional certificate in Forensic Investigation at Iowa Western Community College in

Council Bluffs, IA. In the fall of 2007 Mike was hired on at the Douglas County Sheriff's Office as a Crime Scene Investigator.

Mike has been married for eleven years, and has two very busy boys (4th grade and 1st grade). Before the kids were born, Mike was very involved with local theatre (practically year round), and only breaking for any inter-mural sports activity that he could get his hands on. Currently his free time is spent with his family and doing various types of commissioned artwork for people.

Upcoming Training Opportunities—2013

April 8-12 Introduction to Composite Art—Instructor: Charles T. Jackson
(Point of Contact: DCSO CSI Supervisor Robert “Justin” Aumann 402-510-5139
email: Robert.Aumann@douglascounty-ne.gov)

June 24-28 Shooting Incident Reconstruction- Instructor: Bevel, Gardner & Assoc.
website: www.bevelgardner.com



The Scoop

Peach Streusel Cake

By Tracey M Ray

Streusel:

- ½ cup all-purpose flour
- ¼ cup packed light brown sugar
- ¼ tsp salt
- 3 tbs unsalted butter, softened
- 1 cup chopped toasted pecans

Batter:

- 2 cups all purpose flour
- 1 tsp baking powder
- 1 tsp baking soda
- ½ tsp salt
- 1 stick unsalted butter, softened
- 1 cup sugar
- 2 large eggs
- 1 cup sour cream
- 2 tsp vanilla extract
- One 10 ounce bag frozen peaches, coarsely chopped

1. Preheat oven to 325 degrees, butter and flour a 9 inch springform pan
2. Streusel: In a bowl, using your fingers, combine the flour, brown sugar and salt. Add the butter and mix until smooth. Add the pecans; press the mixture into clumps.
3. Batter: In a bowl, whisk the flour, baking powder, baking soda and salt. In a large bowl, beat the butter and sugar at medium-high speed until light, 3 minutes. Beat in the eggs 1 at a time; beat in the sour cream and vanilla. Add the dry ingredients and beat at low speed until incorporated.
4. Spread two-thirds of the batter in the pan. Fold the peaches into the remaining batter, spoon into the pan. Scatter the streusel on top.
5. Bake for 1 hour and 30 minutes, or until a toothpick inserted in the center comes out clean; loosely cover with foil for the last 15 minutes of baking.
6. Transfer to a rack, cool for 30 minutes, then remove the ring and let cool completely before serving.





Laugh Lines

FOR THOSE OF YOU WHO HAVE PETS, THIS IS A TRUE STORY.
FOR THOSE THAT DON'T, IT'S ALSO A TRUE STORY.

The following was found posted very low on a refrigerator door.

Dear Dogs and Cats: The dishes on the floor with the paw prints are yours and contain your food. The other dishes are mine and contain my food. Placing a paw print in the middle of my plate does not mean that is suddenly your food, nor do I find that aesthetically pleasing in the slightest.

The stairway was not designed by NASCAR and is not a racetrack. Racing me to the top of the stairs is not the object. Tripping me doesn't help because I fall faster than you can run.

I cannot buy anything bigger than a king sized bed. I am very sorry about this. Do not think I will continue sleeping on the couch to ensure your comfort. Dogs and cats can actually curl up in a ball when they sleep. It is not necessary to sleep perpendicular to each other, stretched out to the fullest extent possible. I also know that sticking tails straight out and having tongues hanging out on the other end to maximize space that you are taking up, is nothing but sarcasm.

For the last time, there is no secret exit from the bathroom! If, by some miracle, I beat you there and manage to get the door shut, it is not necessary to claw, whine, meow, try to turn the knob or get your paw under the edge in an attempt to open the door. I must exit through the same door I entered. Also, I have been using the bathroom for years - canine/feline attendance is not required.

'The proper order for kissing is: Kiss me first, then go smell the other dog or cat's butt. I cannot stress this enough.

Finally, in fairness, dear pets, I have posted the following message on the front door:

TO ALL NON-PET OWNERS WHO VISIT AND COMPLAIN

(1) They live here....you don't.

(2) If you don't want their hair on your clothes, stay off the furniture. That's why they call it "fur"-niture.

(3) I like my pets a lot better than I like most people.

(4) To you, they are animals. To me, they are adopted sons/daughters who are short, hairy, walk on all fours and don't speak clearly.

Puzzle:

If you have 12 black socks and 12 white socks in a drawer, how many socks would you have to pull out blindly to have two of the same color?

- A. Six
- B. Four
- C. Three
- D. Five

Employee Birthdays This Issue

October

Mike Krohn

November

Darnell Kush

December

Josh Connelly

Jodi Adams

January

Tracey Ray

Capt Steve Glandt

CL Retelsdorf

February

Justin Aumann

March

Christine Gabig



*Congratulations
to Jodi Monahan
and Eric Adams
on their wedding.*



[http://
www.omahasheriff.org
/services/fsd](http://www.omahasheriff.org/services/fsd)
(under construction)

Crime Lab Director

- Tracey M Ray
Tracey.Ray@douglascounty-ne.gov
402-444-6070

Latent Print Unit:

- Joshua Connelly
Joshua.Connelly@douglascounty-ne.gov
- Angie Olson
Angie.Olson@douglascounty-ne.gov

Chemistry Unit:

- Christine Gabig
Christine.Gabig@douglascounty-ne.gov
- Shanon Tysor
Shanon.Tysor@douglascounty-ne.gov

Multi-Media Unit:

- Clelland Retelsdorf
Clelland.Retelsdorf@douglascounty-ne.gov

Crime Scene Unit:

- Justin Aumann (Field Supervisor)
Robert.Aumann@douglascounty-ne.gov
402-444-7524
- Darnel Kush
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- Clelland Retelsdorf
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- Shanon Tysor
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- Angie Olson
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- Mike Krohn
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- Allison Sundeen
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- Jodi Adams
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- Ashley Paggen
Ashley.Paggen@douglascounty-ne.gov

DOUGLAS COUNTY SHERIFF'S OFFICE FORENSIC SERVICES DIVISION

15345 West Maple Road
Omaha, NE 68116

Main Phone: 402-444-6855
(8am-5pm, Mon-Fri)

Crime Scene Unit: 402-444-6625
(24/7, 7 days/week)
Fax: 402-444-3644

Core Values

The members of the Douglas County Sheriff's Office Forensic Services Division are committed to the following principles:

Service

Furnish timely and accurate results with reasonable scientific certainty by providing clear and concise reports and by treating all agencies and their evidence with care, respect, professionalism, and confidentiality.

Quality

Provide the highest quality forensic work to our customers through utilizing only validated procedures that are recognized by the forensic community and by implementing standards in compliance with ISO/IEC 17025:2005 and the ASCLD/LAB accrediting body.

Integrity

Perform forensic analyses within the parameters of observing the utmost ethical awareness and integrity in the pursuit of the unbiased truth.

Accountability

Ensure the reliability of analytical results through investing in competency testing of all personnel in each forensic discipline in which they work, and by requiring proficiency testing on an on-going basis.

Development

To further the development of personnel by providing training opportunities in the latest forensic trends and encouraging membership and active participation in appropriate and reputable forensic science organizations.

Property and Evidence Division

Located at 3601 N 156th St, Omaha

Hours of Operation are 9-4 Monday through Friday, closed on Wednesday.

Contact information:

Annette Doyle - (402) 444-6747

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Please contact to make an appointment.

Newsletter Creator:

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