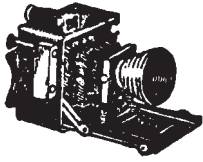




# THE PRINT

*The Official Publication of the Southern California Association of Fingerprint Officers  
An Association for Scientific Investigation and Identification Since 1937*

*October/November/December 2008 Volume 24 Issue 4*



## OFFICERS 2008

### PRESIDENT

Marvin Spreyne  
Riverside District Attorney (Retired)  
(760) 349-3581  
spreyne@scafo.org

### FIRST VICE PRESIDENT

Amy Hines  
Riverside District Attorney's Office  
(951) 304-5398  
hines@scafo.org

### SECOND VICE PRESIDENT

Mari Johnson  
Los Angeles Sheriff's Dept.  
(213) 989-2163  
mari.johnson@scafo.org

### SECRETARY

Teri Eklund  
San Diego Police Dept.  
(619) 525-8481  
eklund@scafo.org

### SERGEANT AT ARMS

Vacant

### CHAIRMAN OF THE BOARD

Craig Johnson  
Los Angeles Sheriff's Dept.  
(323) 260-8562  
craig.johnson@scafo.org

### DIRECTOR

Lisa Jackson  
Los Angeles Sheriff's Dept.  
(213) 989-2163  
jackson@scafo.org

### DIRECTOR

Vacant

### DIRECTOR

Cindee Lozano  
Fullerton Police Dept.  
(714) 974-3170  
lozano@scafo.org

### DIRECTOR

Larry Rodriguez  
Santa Barbara Sheriff's Dept.  
(805) 681-4126  
rodriguez@scafo.org

### HISTORIAN

William F. Leo  
Los Angeles Sheriff's Dept.  
(213) 989-2163  
leo@scafo.org

### TREASURER

Debbie Stivers  
Glendale Police Dept.  
(818) 548-3149  
stivers@scafo.org

### PARLIAMENTARIAN

Susan Garcia  
Los Angeles Sheriff's Dept.  
(213) 260-8563  
garcia@scafo.org

### EDITOR

Steven Tillmann  
Los Angeles Sheriff's Dept.  
(213) 989-2163  
tillmann@scafo.org

### WEBMASTER

Alan McRoberts  
McRoberts Forensic Investigations  
(951) 693-9082  
mcroberts@scafo.org

WWW.SCAFO.ORG

## D.A. wins authority over crime lab

Supervisors settle feud with sheriff by giving Rackauckas a hand in forensic operations

By TONY SAAVEDRA  
The Orange County Register

Despite concerns of a potential conflict of interest, District Attorney Tony Rackauckas today won partial authority over the Orange County Crime lab, in an attempt to settle a feud between his office and the sheriff's.

The board of supervisors voted unanimously to place Orange County's forensic operations – previously run by the sheriff's department – under the supervision of Rackauckas, Sheriff Sandra Hutchens and County Chief Executive Officer Thomas Mauk. Still to be worked out, however, is the extent of involvement that the three-member panel will have in the day-to-day operations of the lab.

The vote followed some opposition by critics fearful of the county prosecutor having any control over the analysis of forensic evidence. Among the critics was Buena Park resident James Ochoa, who was incarcerated 16 months for a carjacking that he did not commit. A lab analyst in the Ochoa case accused a county prosecutor of urging her to change her conclusion that DNA found at the crime scene did not belong to Ochoa.

'After what happened to me, it is pretty clear the district attorney doesn't care about guilt or innocence, he cares about his career,' wrote Ochoa in a letter delivered to the board. Ochoa wrote the letter at the request of the New York –based Innocence Project, which uses DNA evidence to free the wrongly convicted. Ochoa was released from prison in 2006 after crime scene DNA was linked to another man, who confessed.

Rackauckas explained to the board that his prosecutor merely questioned the analyst about her conclusion and did not try to influence her. '(But) once an allegation is made, it can be pretty hard for the other party to disprove it,' Rackauckas said. The board decided that the three-member panel would be reviewed after a year and that a committee of stakeholders – such as police chiefs and the public defender – would be formed to help advise the trio.

Rackauckas and the others will initially focus on building a new automated DNA lab for high-volume property crimes, in an attempt to catch petty criminals before they graduate to violent crime. The new lab will be merged with the existing crime lab within the sheriff's department.

Rackauckas also said he expects his office to become more involved in triaging which forensic samples get analyzed first, concentrating on those most likely to influence a case. Hutchens accepted the plan as a way of healing the rift between her department and Rackauckas, but expressed concern of having too many bosses running the lab.

The district attorney's office and sheriff's office have been locked in a long-running feud over how DNA evidence should be managed. Rackauckas has accused the crime-lab of being glue-footed in analyzing DNA, running up a 1,800-sample backlog. Critics of Rackauckas have countered that his prosecutors routinely try to persuade analysts to return conclusions favorable to their cases.

Rackauckas assured the board that he would not interfere with the lab's science.

# Lifting Latent Fingerprints from Difficult Surfaces

(Original article was published in *Evidence Technology Magazine*, May/June 2008 Issue. [www.evidencemagazine.com](http://www.evidencemagazine.com) Written by Gary Gulick )

ALMOST ANYONE can find, process, and lift a latent print that happens to be in a logical and obvious place like a door handle, a beer can, or a butcher knife. But sometimes, a latent print is not just sitting there in a logical and obvious place. Sometimes, you have to use your imagination to find the print and your skills to lift it.



“A lot of times, it is our own attitude that defeats us,” said Daryl Clemens, a crime-scene technician with the Forensic Services Unit of the Grand Rapids (Michigan) Police Department. We don’t look, so we don’t find anything. Other times, a person will just look at an unusual object and say “I can’t get fingerprints from that!” And they don’t even try to do anything with it.

Clemens went on to tell about a class he was teaching a few years ago when one of the students’ assignments was to lift latent prints from a golfball. Most thought the assignment was impossible because of the dimpled nature of the golfballs surface. And when they succeeded, they were amazed. “One guy just happened to be working a case that involved golfballs,” Clemens said. “It seems somebody had stolen golfballs from a golf course and had then used a slingshot to take out a bunch of car windows. He was very happy to learn how to get prints from that surface.”

Different cures for the closed-mind syndrome

Experts like Clemens who teach classes in latent-fingerprint recovery techniques will agree that a closed mind or inactive imagination are often a technicians’s main obstacle. Michael Stapleton is one of those experts. He recently retired from the Federal Bureau of Investigation (FBI) after 34 years to start his own company, Forensics R Us. His approach to overcoming the notorious closed-mind syndrome is quite simple:

“I will ask students to bring something really unusual that they think might be challenging for latent-print recovery,” said Stapleton.

“One officer found a feather outside on the ground and brought it in to class. He placed his own print there to see if it could be developed—and he was surprised when we succeeded.” (See the photo at the top of this page.) Stapleton described some other unusual surfaces that had been processed by his students, including lemons, bananas, and tree leaves.

Clemens had some similar stories about finding and lifting prints from strange or difficult places.

“We made a burglar with latent prints from a fork,” Clemens recalled. “We found his prints on both ends of the fork: the handle and the tines. Why did we even try? Well, mainly because the homeowner told us the burglar must have helped himself to some lunch while he was in the house. So I threw some dust on it—and there was a print.”

Other strange recoveries for Clemens include the trigger on a pump-spray bottle. “A guy was cleaning up blood at his crime scene with the cleanser in the spray bottle. We found his prints on that tiny, curved trigger on the bottle.”

But one of the trickiest examples in Clemens’ experience involved the time they recovered a print from the inside of an automobile’s dashboard. “They had stolen a car stereo and in doing so, they had to peel back the dashboard to get to it. We got latent prints that were on the plastic on the inside of the dashboard.”

Firearms are perhaps among the most difficult objects to yield good latent fingerprints. According to Clemens, technicians will typically get prints on only about ten percent of the guns that are inspected.

“Why are guns so difficult? There are a number of factors involved,” said Clemens. “One of them has to do with the textured nature of the area where the gun is being held. That area is not good for prints. Another factor has to do with how the firearm was treated before the crime. If the person took good care of it, then it probably has oil on it—which makes it almost impossible to get a good print. And if they have not taken care of it, the surface might be rusty—and rust is not good for lifting prints.”

Always be alert for the latest technology

Many agencies have a protocol that calls for fuming almost all guns with superglue (cyanoacrylate). “When I was still with the FBI,” recalled Stapleton, “super-glue was one of our best developers for fingerprints. In one case, we were able to develop a fingerprint with superglue seven years after the crime. That just goes to prove that latent fingerprints can last a long time!”

Unfortunately, a lot of departments are pressured by time constraints, said Stapleton. “They want their people to get in there and get out. But in the FBI, we were always able to take our time.”

Stapleton cited a 1993 case as an example. In 1993, the FBI was helping with a case where a 12-year-old girl—Polly Klaas—was kidnapped from her bedroom at 10:30 at night.

“The Petaluma Police Department had been in that bedroom before we got there and they had dusted everything with black fingerprint powder. But none of the prints led them to the kidnapper. We decided to try something new and unusual that most departments did not have back then: an alternate light source (ALS). Our team used Redwop fluorescent powder and the forensic ALS to go over the bedroom. And that system was the only one that revealed the friction-ridge impression that came back to the kidnapper, Richard Allen Davis.”

What can crime-scene teams across the country learn from this?

“It is basically a matter of trying all of the tools at your disposal to see if you can get the fingerprint,” said Stapleton. “The FBI’s IAFIS (Integrated Automated Fingerprint Identification System) is a great tool. If you can get a latent-print impression from the crime scene, then you stand a very good chance of matching it with someone in the system.”



These photos illustrate that evidence found after a fire can still bear latent fingerprints that can be developed by gently brushing the soot off of the object. The result is shown below. No fingerprint powder was used.

If possible, you should always stay current with the latest products and techniques. Here are observations about various tools:

### Superglue fuming

As you already know, there are advantages and disadvantages to almost everything in this world. For example:

One of the advantages of superglue fuming is that you can fume a piece of evidence and still send it to the laboratory for DNA testing. (Several studies show that testing for DNA actually goes better after the fuming.) Superglue fuming is also effective on items that have been outside or are wet, like beer bottles or broken

window glass. Here are some of the disadvantages: If you fume evidence too long, you will probably end up with a chalky mess. Also, this technique will not work on porous items (try ninhydrin, instead). And the item you are going to fume is limited to the overall size of your fuming tank.

### Magnetic powder

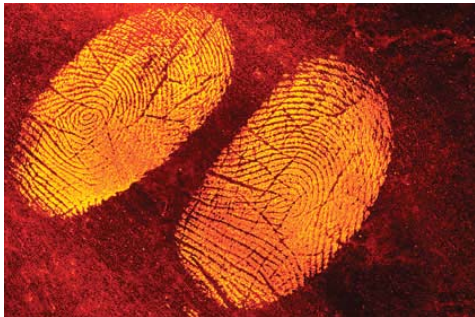
Most experts consider magnetic powder to be a little bit more sensitive and that it tends to work better on some of the harder surfaces. It will not work well, however, on any surface that is wet or even slightly magnetized.

### RUVIS

This acronym stands for reflected ultra-violet imaging system. The comments about this system from Clemens were mostly positive (“It is very effective at finding prints you would have missed otherwise”), although he also had some cautionary comments about its use (“It is expensive—and it is somewhat time-consuming because you have to process the whole room, photograph your findings, and then come back and do the actual lifting.”)

### ALS

Most forensic experts will agree that the alternate light sources (ALS) are remarkably effective in helping you find latent prints and biological fluids. They are expensive, however. And some of the experts suggest that certain small, light-emitting diode (LED) devices can be used for the same purpose. They are not as bright as the larger ALS units, of course. But they are cheaper.



The photo above shows latent fingerprints that were developed with an orange fluorescent powder. An orange filter was then placed on the camera lens to block out blue light, thereby enhancing the detail in the fingerprint image.

### Polyvinyl-siloxane

For many technicians, the gel products known as Accutrans and Forensic Sil are among their top choices for lifting prints from difficult surfaces. First, you dust the print and then apply the gel. It only takes about five minutes to dry—and when you pull it off, you have the powdered impression. Stapleton said they had even recovered a print from a tree leaf using Forensic Sil. The same individuals who find these products to be their favorites do caution that the product is expensive—and they recommend taking care to cap the tube so the gel does not harden.



They can be developed on the adhesive side of tape with products designed for this application. In this case, the prints were developed on the adhesive side of electrical tape. The non-sticky side can also yield latent fingerprints with the use of superglue.

Some final thoughts about finding difficult prints: Clemens had some straightforward advice to anyone in law enforcement who is involved with finding prints at crime scenes.

“You must practice,” said Clemens. “And the time to practice is not when you are out on a major event. The time to practice is when you are on a minor call or when you can work on some test samples that you’ve made up.

“But there are basically two real keys to success in working hard-to-find latent fingerprints. Number One: Have an open mind. And Number Two: Put powder on a variety of things to see what you can find.”

The bottom line is simple:

You will never know if something has prints on it until you have tried everything to find them. To say that you have absolutely no chance of finding prints is the wrong attitude. And that attitude that will be reflected by the number of latent fingerprints you can collect at the crime scene.

# A Perspective From a New Examiner

## Back To The Basics

I am a new latent print examiner with less than one year experience. I have made a few observations during my experience as an examiner. However, I would like to share just one which I believe is an important one because it goes back to the basics in fingerprint training.

I was trained by a seasoned examiner with over twenty years of teaching experience. While being instructed on the technique for lifting and documenting a latent finger print, My knowledgeable instructor told me the following; Write down a detailed description of where the latent print was lifted from to include a drawing, Indicate the direction the print was on the surface with an arrow, and include any other information which would help provide a clear mental picture of the lift area. He told me this information because it shows how the suspect handled the item as well as provide the examiner with information to help orient and search the ridge detail.

This basic step in evidence collection makes sense, Right? I think it does too. However, I just started doing case work and have found this basic and very important step to be reduced to the following; ‘ bedroom window sill’, ‘picture frame in bedroom’, ‘side of television in bedroom’, and ‘driver side window.’ These are just some examples given by fairly new personnel and seasoned personnel alike. In your matter of fact, I have done the exact same thing. Only now do I realize how wrong I was in providing minimal information.

How did I make this observation you ask? Well, I was trying to orient and search a difficult

latent print which I believed to be a portion of ridge detail from the palm and thought, ‘ you know what?, I’ll check the description and picture on the latent print card to help.’ So I did just that. It read, ‘picture frame in bedroom’ with a hand drawing of a square depicting the picture frame. Wow that helped!!!

I started looking at several latent lift cards from various personnel and saw the same types of descriptions and drawings. I know we sometimes do this to save time and move on to the next call. However, as a new examiner I ask everyone in the ‘biz’ to get back to the basics and do the documentation in a manner which creates a mental picture. This will help catch the bad guy in a more time efficient manner.

Ray Davidson  
Deputy Sheriff  
Los Angeles County Sheriff’s Department  
Scientific Services Bureau / Latent Print

*(Editor’s Comment - Thanks Ray for submitting this article for publication, and to remind all of us, new and old, of the importance of documentation on our latent lifts. Keep up the good work, they may even let you get off training someday soon)*

## President's Message – Marvin Spreyne

Greetings SCAFO members and readers of *The Print*.

What an exciting year it has been serving as the 71<sup>st</sup> President of this professional association dedicated to the science of fingerprint identification. I feel quite honored to have followed in the footsteps of those that held this prestigious office before me.

Our 17<sup>th</sup> annual seminar was a success in many ways, one of which was that the coordinator, **Mari Johnson**, *Los Angeles Sheriff's Department*, provided a host of talented speakers on a variety of topics. The seminar proceeded smoothly with the assistance of those executive staff members present along with many other volunteers.

During the seminar the election of officers for the 2009 year was conducted of which resulted in **Amy Hines**, *Riverside D.A. Office*, being elected as President. Thus the upcoming year of 2009 will bring about a change in presidency both with our association and with of country. Let us support both of those individuals.

During the 2008 year this association welcomed many new members into its fold. I encourage those 'new' members and all other members to attend the bi-monthly training meetings with thoughts of becoming future directors and afterwards going thought the chairs and finally becoming the President of this association. As the quote by Emerson goes, 'We find in life exactly what we put into it.'

During the 2009 year I will serve the association as its Chairperson and have also accepted the challenge of being the editor of *The Print*. I will be mentored by outgoing Editor **Steve Tillmann**, *Los Angeles Sheriff's Department*, and will look to the membership for their support in providing articles of interest.

*'There are not mistakes, only lessons. Growth is a process of trial and error and experimentation. The failed experiments are as much a part of the process as the experiments that ultimately work.'*

Unknown

I trust that the membership enjoyed a relaxing thankful Thanksgiving holiday and that the upcoming seasonal holiday, to be political correct we leave it as that, will find us all blessed. Our country is experiencing difficult times however we are a strong determined people and we will overcome the challenges.

To conclude, I thank the membership, one and all, for the opportunity to have served this professional association!

## One Cheeseburger away from the clinker

*(Reprinted from an article in the L.A. Times, 9/22/2008)*

As if we needed one more reason to lay off the junk food ... well, maybe we do need another reason.

Eating junk food could land you in the pokey faster, if you're criminally inclined. A new forensic fingerprinting technique relies on the fact that people who have diets filled with processed foods may leave metal-corroding fingerprints that are easier to detect.

John Bond (no relation to James, probably), a researcher at the University of Leicester in England and a scientific support officer at the Northamptonshire Police, came up with the concept. Sweaty fingerprints, he believes, contain more salt if the person's diet consists of processed foods. And that salt can be corrosive to metal. Ergo, a better impression. He and some colleagues have even found a way to boost a fingerprint's image left on a small-caliber metal cartridge case, even after it's been fired.

Bond spoke about his findings at a conference on forensic science at the university, and said in a release, "On the basis that processed foods tend to be high in salt as a preservative, the body needs to excrete excess salt, which comes out as sweat through the pores in our fingers."

He went on to hypothesize that there might be a roundabout connection between obesity and the chances of being nabbed after committing a crime, since those who eat a lot of processed foods tend to be heftier.

If Bond could only find a way of getting that darn Cheetos residue off your fingers. That would be helpful. Because those leave a very obvious trail.

-- Jeannine Stein

# MINUTES OF OCTOBER MEETING

**DATE:** October 10th and 11th  
**LOCATION:** Double Tree Hotel, Ontario Airport  
**HOST:** Mari Johnson  
**SECRETARY:** Teri Eklund  
**PROGRAM:** 2008 Annual Training Seminar  
**CALL TO ORDER:** General meeting, 12:47 hours by President Marvin Spreyne  
**PLEDGE OF ALLEGIANCE** Led by Past President, Steve Tillmann  
**ATTENDANCE:**

**PAST PRESIDENTS:** Alan McRoberts (1991); Clark Fogg (1994); Steven Tillmann (2002); Susan Garcia (2006) and Craig Johnson, (2007).

**EXECUTIVE BOARD:** President Marvin Spreyne, 1st Vice President Amy Hines, 2nd Vice President Mari Johnson, Treasurer Debbie Stivers, Secretary Teri Eklund, Directors - Cindee Lozano, Larry Rodriguez, Lisa Jackson, and Debbie Stivers Parliamentarian Susan Garcia, .

**EXECUTIVE BOARD Absent:** Historian Bill Leo

**Members and guests present: 103**

## OLD BUSINESS:

### Second Readings:

Angela Hilliard, Glendale P.D.  
Ray Davidson, LA Sheriff  
Glenn Kamimura, LA Sheriff  
Tony Nguyen, Poona PD  
Motion to Accept: Susan Garcia  
Second: Sylvia Romero

### Swear Ins:

by 1994 Past President Clark Fogg  
Dominique Riley of Orange County Sheriff

**OTHER:** None

## NEW BUSINESS:

### First Readings

Emile Stanfield, LA Sheriff

Recommended by: Melan Hoang  
Michelle Acevedo of LA Sheriff's Dept  
Recommended by: Mari Johnson of LA Sheriff's Dept  
Adriana Arroyo, Beverly Hills PD  
Recommended by: Clark Fogg, Beverly Hills PD  
Segalit Oz, Beverly Hills PD  
Recommended by: Clark Fogg, Beverly Hills PD  
Johnna Butcher, Orange County Sheriff  
Recommended by: Rachel Minick, Orange Sheriff  
Dan Rosell, LA County Sheriff  
Recommended by: Mari Johnson, LA County Sheriff  
Mirela Cervantes, LA County Sheriff  
Recommended by: Josefina Mejia, LA County Sheriff

## ANNOUNCEMENTS:

Ricardo Tomboc – There is an opening for a Forensic Specialist I in Riverside PD

**OTHER:** Steve Tillman entered a motion to accept the new Board; Bob Spears seconded it.

**ATTENDANCE DRAWING:** N/A

## DOOR PRIZES:

Provided by Provided by Board Members  
Canon camera donated by Mike Nadler of Canon, USA

## NEXT MEETING

Date: Dec 6, 2008  
Time: To be announced  
Location: Mario's in Riverside, Hosted by Amy Hines

## MOTION TO ADJOURN:

Motion by: Ricardo Tomboc  
Second: Teri Eklund

## MEETING ADJOURNED:

1303 hours

---

*'Every man owes a part of his time and money to the business or industry in which he is engaged. No man has a moral right to withhold his support from an organization that is striving to improve conditions within his sphere.'*

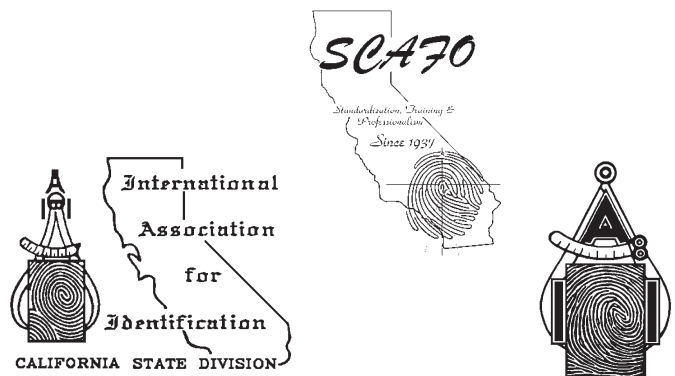
*- President Theodore Roosevelt, 1908*

For subscription or membership information, or address corrections contact:

**S.C.A.F.O.** Teri Eklund, Treasurer  
P.O. Box 21273  
El Cajon, CA 92021  
eklund@scafo.org  
\$20.00 yearly subscription (attendance required for membership)  
\$30.00 yearly for International Subscriptions

**C.S.D.I.A.I.** Felita D. Chapman  
P.O. Box 125  
Fairfield, CA 94598  
(707) 208-2348  
csdai-sectre@sbcglobal.net  
\$25.00 yearly membership

**I.A.I.** Joe Polski, Chief Operations Officer  
2535 Pilot Knob Road, Suite 117  
Mendota Heights, MN 55120-1120  
(651) 681-8566 iaisecty@theiai.org  
\$60.00 yearly membership



93rd Annual CSDIAI Training Seminar

May 18 - 21, 2009

Doubletree Hotel

San Jose, California

*In This Issue*

pg.

1 D.A. wins authority over  
crime lab

2 Lifting latent fingerprints  
from difficult surfaces

5 A perspective from a new  
examiner

6 Presidents Message

6 One cheeseburger away from  
the clinker

7 Minutes of October Meeting

---

SCAFO Members:  
Get 'yourname@scafo.org'.  
See instructions on the  
website's email page.

*-- Upcoming Events/Schools/Seminars--*

Dec 6, 2008

S.C.A.F.O. December Meeting  
Riverside, Calif.

May 18-21, 2009

CSDIAI Annual Training Seminar  
San Jose, California



*Southern California Association of Fingerprint Officers*  
*An Association for Scientific Investigation and Identification Since 1937*