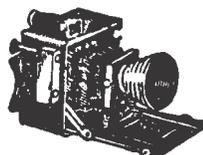




# THE PRINT

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

*March / April 2004 Volume 20 Issue 2*



OFFICERS 2004

**PRESIDENT**

Ed Palma  
San Diego Police Dept.  
(619) 531-2573  
palma@scafo.org

**FIRST VICE PRESIDENT**

Dennis Uyeda  
Calif. Dept. Of Justice  
(916) 227-3314

**SECOND VICE PRESIDENT**

Susan Garcia  
Los Angeles Sheriff's Dept.  
(213) 989-2163  
garcia@scafo.org

**SECRETARY**

Gina Russell-Durgin  
Escondido Police Dept.  
(760) 839-4770  
russell@scafo.org

**SERGEANT AT ARMS**

Tom Washington  
San Diego Police Dept.  
(619) 531-2838  
washington@scafo.org

**CHAIRMAN OF THE BOARD**

George Durgin  
USPHS  
(310) 831-6123 x 116  
durgin@scafo.org

**DIRECTOR**

Lisa DiMeo  
Arcana Forensic Services  
(619) 992-0690  
dimeo@scafo.org

**DIRECTOR**

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

**DIRECTOR**

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

**DIRECTOR**

Sarah Watson  
Los Angeles Sheriff's Dept.  
(213) 989-2163  
watson@scafo.org

**HISTORIAN**

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

**TREASURER**

James Lawson  
NCIS- San Diego  
(619) 556-1390  
lawson@scafo.org

**PARLIAMENTARIAN**

Clint Fullen  
San Diego Police Dept.-Retired  
Forensic Consultant  
(858) 259-2853  
fullen@scafo.org

**EDITOR**

Alan McRoberts  
McRoberts Forensic Investigations  
(909) 693-9082  
mcroberts@scafo.org

WWW.SCAFO.ORG

## Prisoner Confesses to 1965 Killing

After Orange police report a long-awaited fingerprint match, a Texas inmate admits he beat to death an elderly woman who had offered him food.

*(This article is reprinted from the January 28, 2004, issue of the Los Angeles Times.)*

By **DAVID HALDANE**  
Times Staff Writer

Orange police say they have solved a 38-year-old murder case that has frustrated them for years.

Confronted by detectives in Texas, where he has been incarcerated for a decade, William Self, 64, recently confessed to beating an elderly woman over the head with the lid of a pressure cooker on May 6, 1965.

"This was important, because you could call her a faceless victim," Sgt. Dave Hill, a spokesman for the department, said Tuesday regarding the killing of Floy "Faye" Redmon, 75, at her home in the 600 block of East Walnut Avenue. Because she was a widow with no known relatives, Hill said, her death went largely unnoticed outside the Police Department. "We don't want to forget the victims of crimes," Hill said. "We try to solve every crime that we can."

The break in this one, he said, came last year when forensic investigators followed their annual habit of entering fingerprints found on a coffee cup and saucer in Redmon's kitchen into a national FBI databank. For years, he said, the results had come back negative. Now, suddenly, there was a hit.

"We had access to that database before," Hill explained, "but those particular prints were not accessible. The various databases were still in the process of connecting with each other effectively."

After determining that the fingerprints belonged to an inmate at Huntsville State Prison in Texas, Hill said, Det. Steve Booze, the department's chief robbery and homicide investigator, took a trip there to meet him.

"I think [Self] was shocked, to say the least," Booze said Tuesday. "At first, he was very reserved — kind of seeing what we had before he would talk to us. In the end, he said he was relieved, that he had lived with this for a long time and was glad that he finally got a chance to talk about it."

The story Self told was consistent with the evidence still stored in the department's property room. In 1965, the inmate told Booze, he had gone AWOL from the Marine Corps while stationed at what was then the Santa Ana — later the Tustin — air base.

*(continued from front page.)*

Living as a transient, Self said, he met Redmon in her frontyard. She offered him something to eat and drink and, once inside, he beat her to death with the pressure cooker lid and ransacked her house for money.

In subsequent years, Self said, he lived the life of a vagabond, traveling widely throughout the western states and as far east as Florida, surviving mostly on odd jobs.

He was arrested in 1994 and convicted of killing his mother, with whom he had been living.

Self is serving a 50-year sentence for the killing. "If he gets out in Texas, he'll be 102 years old," said Booze, who was in high school when Redmon was killed.

Hill said the case has been turned over the Orange County district attorney's office, which will decide whether charges should be filed.

## **Man who escaped Louisiana prison guards in 1978 caught in Compton**

*(This Associated Press article was downloaded January 30, 2004, from www.mercurynew.com.)*

**COMPTON, Calif.** - A man who escaped from Louisiana State Penitentiary guards during a hospital visit 25 years ago has been arrested by the FBI in California.

Frank Milsap, 57, was picked up Wednesday in Compton, and jailed pending a hearing to determine whether he will be brought back to Louisiana to serve out a 40-year prison sentence for armed robbery.

"We want him back," Angola Warden Burl Cain said Thursday. "I want the inmates to know that if you run away, we won't stop looking for you."

Milsap was convicted in a 1971 holdup of a Baton Rouge, La., loan company. He escaped from a guard in August 1973 while he was with four other inmates undergoing treatment at Earl K. Long Memorial Hospital in Baton Rouge.

He was recaptured, but escaped again in June 1978 by overpowering two guards in the prisoners' ward at the same hospital, said Col. Eric Sivula, a fugitive hunter for the state prison system.

Sivula said Milsap served at least 13 years in a California prison for murder while he was on the lam from Louisiana.

Milsap was convicted and incarcerated as "Joe Forrest," and California authorities sent the FBI a badly smudged set of fingerprints that analysts were unable to use in comparing against the prints of known fugitives, Sivula said.

Sivula said state prison officials, working with the FBI, developed information, including a better set of fingerprints, that linked Milsap to the alias.

## **Man Freed in 1997 Shooting of Officer**

### **Judge gives ruling after fingerprint revelation**

*(This article is reprinted from the January 24, 2004, issue of The Boston Globe.)*

By **JONATHAN SALTZMAN**

**MAC DANIEL**

Globe Staff, 1/24/2004

**A** judge freed a Roxbury man from prison yesterday after Suffolk County prosecutors acknowledged that the fingerprint used to convict him of shooting a Boston police officer seven years ago was not his.

The stunning reversal occurred two days after prosecutors vowed to retry Stephan Cowans for shooting Officer Gregory Gallagher, even though newly analyzed DNA evidence showed that Cowans was not the shooter. Suffolk Assistant District Attorney David E. Meier said on Wednesday that his office would retry Cowans, relying on "compelling" evidence, including a fingerprint on a glass the shooter used.

But yesterday, Meier reversed himself, telling Superior Court Judge Peter Lauriat that the fingerprint evidence used at trial did not come from Cowans. "I can conclusively and unequivocally state, your honor, that that purported match was a mistake," Meier said, based on forensic testing conducted this week.

Cowans, who had served 6 1/2 years for a shooting he insisted he did not commit, walked out of Suffolk Superior Court a free man. He became the seventh person to challenge a Suffolk County conviction successfully since 1997.

Cowans, who was convicted in 1998 of shooting and wounding Gallagher in a Roxbury backyard, said he never lost hope during his years in prison, because he knew he was innocent and was confident that somehow the truth would surface.

"I never thought I would never get out," the 33-year-old Roxbury man said calmly after his release, flanked by delighted relatives and lawyers. "I was one who never gave up on myself."

Boston police did the original analysis of the fingerprint lifted from a glass of water from which the shooter drank after he forced his way into a nearby house. But after Cowans's legal team presented new DNA evidence this week showing that he was not the person who drank from the glass or wore the hat and sweat shirt discarded at the scene, the district attorney's office had Boston and

State Police specialists reanalyze the fingerprint.

DNA analysis of evidence found at crime scenes was not routinely done at the time of Cowans's trial.

Meier was told yesterday morning that the new fingerprint analysis showed that the thumbprint did not belong to Cowans, and the prosecutor contacted Cowans's lawyers.

Without comment, the judge threw out the conviction and freed Cowans. Meier said the district attorney's office has no intention of retrying Cowans "given the state of the evidence."

In a late-afternoon news conference at Boston police headquarters, Suffolk District Attorney Daniel F. Conley and Acting Police Commissioner James M. Hussey expressed regret and embarrassment over the mistake that led to the imprisonment of an innocent man.

"Seven years ago, the criminal justice system failed Stephan Cowans," Conley said. "It took seven years for that mistake to be corrected, seven years of Stephan Cowans's life that he can't get back. On behalf of the criminal justice system, we extend a sincere apology to Mr. Cowans."

Conley said there will be a thorough review of "the facts and circumstances of this case, the conviction, and the error. We cannot accept a high percentage of success as sufficient; we cannot accept being right just most of the time."

The Boston Police Department has asked the International Association for Identification, the world's largest and oldest forensic group, and the FBI to make recommendations about forming an outside investigative team to review Boston police procedures for analyzing fingerprints, Hussey said.

Nonetheless, Conley said, he believes the misidentification stemmed from "an honest mistake, an error by the technician."

"We also have not forgotten that a police officer was shot and nearly killed in the line of duty nearly seven years ago in a backyard . . . We will continue to investigate the facts and circumstances of that shooting," Conley said.

Hussey said police officials have spoken to Gallagher, now a detective, who was among the witnesses who identified Cowans as his assailant. "He's OK, and he still feels strongly that he's made the right identification," Hussey said.

Cowans was convicted in 1998 of shooting Gallagher in the buttocks with the officer's 9mm Glock service pistol. Gallagher had pursued a man acting suspiciously near Rafael Hernandez School on School Street on May

30, 1997. He scuffled with the man and lost his gun.

On Wednesday, at the request of Meier, Lauriat had agreed to suspend Cowans's sentence of 30 to 45 years in state prison, pending a defense motion for a new trial based on a DNA analysis gathered by lawyers for the New England Innocence Project. Cowans had remained in jail while his family tried to raise the \$7,500 bail.

The New England Innocence Project, which had taken Cowans's case, sent evidence from his trial to a forensic DNA testing company, Orchid Cellmark in Germantown, Md. Sweat from the brim of a baseball cap lost by Gallagher's assailant in the yard was tested, as well as a sweat shirt the gunman removed in a house he forced his way into on School Street. The lab also tested saliva from the rim of a glass mug in the house used by the assailant. The DNA evidence was all from the same individual, but it didn't match Cowans's, the analysis found.

At the hearing Wednesday, Meier said that if the court threw out the conviction, prosecutors would retry the case, because evidence presented at trial, including the fingerprint on the mug, was still "extremely compelling."

The following day, members of the Boston Police Department flew to Germantown to retrieve the mug. Boston and State Police analysts compared the print found on the mug with a known print from Cowans, and they did not match.

Cowans, who changed into a brown suit after he was released but still wore the striped white sneakers he had on in court, said there aren't "any words in the dictionary to explain what it was like" to spend 6 1/2 years in prison for a crime he didn't commit.

But he said he used the time productively, earning his graduate equivalency diploma and training to become a barber. The worst thing was not being able to attend his mother's funeral on Sept. 9, he said.

"My mother was one of my strongest supporters," he said. "You never think you wouldn't be there to attend something so important as your mother's funeral."

On his first night of freedom, Cowans planned to savor his favorite meal, which his grandmother cooked and put in the freezer when she thought he might be released Wednesday. The menu, she said, was a secret.

# A Blow to the Credibility of Fingerprint Evidence

*(This article is reprinted from the February 2, 2004, issue of The Boston Globe.)*

By **JENNIFER L. MNOOKIN**

**SEVEN YEARS** ago a fingerprint left on a glass of water sent Roxbury resident Stephan Cowans to prison for 30-45 years for shooting a police officer.

Cowans was recently released after startling revelations made it clear that he was not the shooter. DNA tests on clothing left near the crime scene and on a saliva specimen from the glass did not match Cowans's DNA. The prosecution still insisted it had the right guy -- after all, his fingerprint was on that glass. But when that fingerprint was reanalyzed by experts, it turned out not to match Cowans after all.

However this particular fingerprint error ends up being explained, it raises important issues that go well beyond the Boston Police Department. The science of fingerprints, once thought to be impregnable, is far from secure. Courts must be hesitant to admit fingerprints as evidence until there is better information about how often mistaken identifications are made.

There are only three possible explanations. One is fraud on the part of the fingerprint examiner. Another is incompetence. The third is error. Each reveals a significant problem in our current use of fingerprint evidence.

What if it's fraud? While most forensic scientists are dedicated professionals, the fact that forensic science is conducted in state crime labs and police departments creates implicit pressures to please the prosecution. Moreover, forensic investigators often know about other evidence linking a suspect to a crime, and this outside knowledge may color their forensic analysis. Independent crime laboratories could insulate forensic experts from both bias and the temptation to be too cozy with the prosecution.

In this case, the district attorney has suggested that the error was probably just an honest mistake, as if this ought to provide some comfort. But it shouldn't. At present, there is virtually no accurate information on just how often fingerprint examiners actually make mistakes -- and unlike DNA experts, fingerprint experts routinely testify that their matches are "100 percent certain."

What is troubling is not that such mistakes might happen. No forensic technique could ever be error-free. But the present dearth of information on mistakes -- either from incompetence or "honest" error -- is simply

inexcusable. Fingerprinting is often said to be infallible, a forensic "gold standard." But if we ask how often declared fingerprint matches are actually wrong, the only honest answer is that no one has any idea.

There are no systematic proficiency tests to evaluate examiners' skill. Those tests that exist are not routinely used and are substandard. In another recent case, even the FBI's proficiency tests were acknowledged by another fingerprint examiner to be absurdly easy. While challenging proficiency tests would not be perfect, they would provide significantly more information about error rates.

More shocking, there are no uniform standards, locally or nationally, about what counts as a fingerprint match. Different jurisdictions, and even different examiners, have different criteria, and the courts have simply left it to the experts' judgment.

In addition, we have no idea how often two individuals -- whose prints would indeed look different if we had access to a complete set of 10 undistorted prints -- might have partial fingerprints that resemble each other enough for an examiner reasonably to mistake them as coming from the same person, especially when the print lifted from the crime scene might be smudged and distorted.

Fingerprints are clearly an enormously valuable investigative tool. But the fingerprint community has little motivation to investigate how often they make mistakes. Fingerprint examiners regularly assert in court that the technique is error-free and that fingerprint matches are a sure thing. Whatever real research ends up showing, fingerprints cannot possibly be as perfect a technique as the experts presently claim. Unless courts make better knowledge about error rates a precondition of its use as legal evidence, the fingerprint experts will have no incentive to measure them.

Fingerprint evidence has enormous cultural power -- in Cowans's case, the prosecutor had said he was prepared to prosecute again, despite the exculpatory DNA findings, precisely because of that supposed fingerprint match. Although numerous defendants have challenged the use of fingerprint evidence in court in the past few years, judges for the most part have not taken these challenges as seriously as they should. Whatever happened in this case, it should be a wakeup call to experts, prosecutors, judges, and the public. Until the limits of fingerprint evidence are better understood, we must be wary.

Fingerprints may be unique. This error, almost certainly, is not.

*Jennifer L. Mnookin is visiting professor of law at Harvard Law School.*

## Brenda van Dam visits Escondido Kiwanis

*(This article is reprinted from the January 29, 2004, issue of The North County Times.)*

By: **ERIN MASSEY**  
Staff Writer

**ESCONDIDO** -- Faced with the impending second anniversary of her daughter's disappearance, Brenda van Dam spoke to a responsive Kiwanis Club of Escondido on Thursday about life without Danielle.

"Two years ago, I wouldn't have believed I would be here," she said during the club's weekly lunch at the Escondido Country Club. "If I didn't have (sons) Derek and Dylan to take care of, I don't think I would be here. I have committed myself to them."

Danielle, 7, vanished from the family's home in Sabre Springs after her father tucked her into bed Feb. 1, 2002. Her parents discovered her empty bed the next morning.

Nearly one month later, her body was found along a road in a rural area of East San Diego County.

The van Dams' neighbor, David Westerfield, was convicted of kidnapping and murdering the child, and is now on death row in San Quentin State Prison.

Van Dam said the family's decision to try therapy and move to Poway to escape the sight of Westerfield's house has been good for her sons.

"The best thing we did for them was to put them right into counseling," she said.

But healing has been difficult. Van Dam choked up Thursday when talking about how Dylan is now the same age as Danielle when she died.

After taking some time off last year, van Dam said she is back and ready to devote all of her energies to the Danielle Legacy Foundation, a nonprofit she formed to honor her daughter's memory through promoting children's safety.

The foundation is trying to raise money to buy enough children's safety videos to provide one for every school in the country, she said. The video, which van Dam hands out at area safety fairs, recommends simple ways for children to fight back if grabbed by a stranger.

"The video tells parents things I would have never thought of," she said, her voice catching. "I taught Danielle about strangers and private parts, but I never thought I'd have to teach her how to survive."

She is also lobbying parents to demand full handprints of their children. She said fingerprints found in Westerfield's motor home were of the lower part of Danielle's finger and not the tip and fingerprint. If the police hadn't found Danielle's body, the district attorney would have been unable to link the print to Danielle, she said.

Van Dam then said she advises parents to keep their children's DNA at the ready by taking a hair ---- down to the root ---- from the child's head and sealing it in a plastic bag.

Van Dam spoke at the lunch on the request of her civil attorney, Spencer Busby, who said he took the Kiwanis Club up on its offer to speak because he likes the group's mission.

"I know the focus of your group is children, and that is ours as well," he told the roughly 65 people at the meeting.

Kiwanis member Chris Wittpenn said he was moved by van Dam's speech Thursday. He had always identified with the van Dams because he has a daughter named Danielle who is about the same age, he added.

"It reminded me about how horrible and sad this was for them," Wittpen said. "But I think it is very good that she is able to make something good come out of it."

For more information on the Danielle Legacy Foundation, visit the Web site at [www.daniellelegacy.com](http://www.daniellelegacy.com) or write to PO Box 501515, San Diego, CA 92150.

Contact staff writer Erin Massey at (760) 740-5416 or [emassey@nctimes.com](mailto:emassey@nctimes.com).

*[Editor-- This article points out the need for parents to retain a complete set of finger and palm prints of their children. The old kid-print programs have diminished with the availability of DNA to identify kidnapped children to their parents. But in the absence of the child, a good set of exemplars (that the parents could provide) would really aid an investigation.]*

# Advancement in Latent Print Processing: Vacuum Cyanoacrylate Fuming

*(This article is reprinted from volume 27, issue 3 (September-November 2003) of "The Prairie Whorlwind" published by the Kansas Division of the IAI.)*

By **JIM McNUTT**

One of the most significant advances in the processing for latent prints occurred with the discovery of using Cyanoacrylate Ester (Superglue) to develop latent prints on nonporous items. Once this initial discovery was made, latent print examiners and forensic scientists have continued to improve on this process so that as many latent prints of value as possible can be found on items of evidence. One advancement is the process of supergluing items under a vacuum to develop high quality latent prints with little, or no, background interference.

Using Cyanoacrylate to develop latent prints was discovered quite by accident in 1977 in Japan. Trace evidence examiner Fuseo Matsumura of the Japanese National Police Agency was mounting hair on slides with superglue. He noticed that his own fingerprints were developing on the glass slides. He told his co-worker Masato Soba, a latent print examiner, of his discovery. After some experimenting with the superglue technique, Masato Soba presented his research to the forensic community in Japan.

In 1979 Ed German and Paul Norkus, of the US Army Crime Lab, were given a demonstration of the superglue technique for developing latent prints while they were stationed in Japan. Although they were not specifically told what was used in the technique, they manage to discover that it was superglue. When they returned to the United States in 1980, they brought the technique back with them.

What occurs is the Cyanoacrylate Ester vapors are absorbed by the latent print residue, which is most commonly a mixture of perspiration and oils. Perspiration is produced by sweat glands in the hands; oils are transferred to the hands from other parts of the body. In the presence of the sweat and oil moisture, polymerization of the ester takes place. Polymerization is the forming of a white product that adheres to the surface; it is plastic in nature and makes the latent prints visible. The Cyanoacrylate polymer stabilizes, or fixes, the developed latent prints. Superglue is nonabrasive and can produce friction ridge formations with very fine ridge detail. Early methods of using superglue to develop latent prints involved placing the items in a chamber with just some liquid superglue and waiting for 2 or more hours for development. Later it was found that heating the superglue increased the

vapor release and caused faster development of the print, reducing the fuming time to less than an hour. Chemical acceleration was also used. One of the most popular fuming techniques is heat and humidity.

With the heat and humidity technique, the superglue is accelerated with heat and some humidity is introduced into the chamber, either from the environment or by placing water in the chamber with the item. Increasing the humidity in the chamber leads to the formation of whiter, more visible prints. This method is quick, simple, and inexpensive. The heat speeds the process, but one can have too much polymer, commonly referred to as over fuming. Also, the path of the vapors cannot be predicted with this method and this may result in uneven coverage of the item.

In 1990 J. E. Watkin of the Royal Canadian Mounted Police found that the superglue was easier to vaporize, and the vapors were more effective, when it was done under a vacuum. When the fuming is done under a vacuum the atmospheric pressure is greatly reduced. One of the most notable differences between heat and humidity fuming and fuming under a vacuum is that with the vacuum most of the moisture is pumped out. Another difference is the actual appearance of the latent.

Under microscopic exam, the heat and humidity print shows ridges covered with a tangled network of fibers, giving it a spaghetti-like appearance. This surface would be more efficient at scattering light, accounting for the whiter appearance of the heat and humidity prints. The vacuum print ridges appear to be covered with a solid layer of polymer.

By using the vacuum technique little, if any, filling in between the ridges occurs. Under a vacuum, all exposed surfaces are treated to about the same amount of superglue fumes. This produces latent prints that are very uniform in appearance with no over development in some areas and under development in other areas. There is also less worry of how to position items in the chamber. For example, in a heat and humidity chamber, if a large trash bag was folded, the outer surfaces could easily be over fumed, with the inner surfaces receiving little or no superglue vapors. If a strong enough vacuum is used, even inner surfaces of an object will be exposed to the superglue fumes. In the example above, the folded trash bag would receive the same amount of superglue fumes on both the inner and outer surfaces. Interestingly, plastic becomes porous under a vacuum. Prints have actually been developed inside sealed plastic bags.

One criticism of the vacuum method is that the latent prints usually have to be dye stained in order to actually see the print. One purpose of using the superglue technique to develop latent prints is so dye stains can be used. The superglue technique fixes the prints so that the dye stain doesn't wash the print away when it is applied. Further, the dye stains are more readily absorbed

by the developed superglue latent prints rather than the item itself. After the latent prints are stained, they are viewed with a forensic light source, which causes them to fluoresce after which they are photographed. The fact that thin superglue prints show up so well with the dye implies that weak prints are being missed when just viewing the item with ambient light. If only the very white and visible latent prints developed with heat and humidity are lifted and no further staining and viewing is done, weaker prints may be missed.

In 1994 the Royal Canadian Mounted Police did a study comparing latent prints developed with the heat and humidity technique to latent prints developed with the vacuum fuming technique. Latent print impressions were placed on objects. These objects were then split into two groups. One group was processed by the heat and humidity method, with the other group being processed with the superglue vacuum method. The resulting latent prints were stained with a variety of fluorescent chemicals and photographed as appropriate.

The photographs were sent to 14 identification bureaus across the country. The Identification Specialists were not told which method was used to develop the two prints in each photo and they were asked to rate the latent prints according to clarity and the lack of background interference. The majority of them chose the vacuum superglue prints over the heat and humidity prints based on better clarity and less background interference. The results of this survey seem to indicate that the superglue vacuum method produces equal to superior results to the heat and humidity method. The latent prints examined in this survey were of very good quality to prevent anyone from choosing one print over another based on the quality of the test impression rather than the processing technique.

In 1993 at the International Symposium on the Forensic Aspects of Latent Prints, Terry Board of the Metropolitan Police Dept., Washington, DC, said that, prior to vacuum fuming, less than 5% of the guns processed by his department yielded fingerprints. After using vacuum fuming, 20% of the guns yielded visible fingerprints after fuming.

Superglue processing under a vacuum is often done by pumping the air out of the chamber and letting the superglue vapors circulate in this reduced pressure environment with no type of acceleration of the superglue. This type of fuming process requires more time, up to several hours, and the fuming process cannot be monitored since the articles are out of view in the vacuum chamber. By accelerating the Cyanoacrylate fuming in the vacuum chamber with heat, a more even fume can be produced. With the heat and humidity method there is always a chance of over fuming or over development of latent prints, but this is not the case with the vacuum chamber. The advantages of using heat acceleration in a vacuum include:

- Thorough and uniform latent print development.
- Fuming time is reduced.
- Developed prints are durable and hold powder and dye stains well.
- The latent prints show excellent ridge detail.

Processing for latent prints under a vacuum does appear to have some advantages over processing with the more traditional method of heat and humidity. Two of the most notable advantages are the lack of over fuming and the uniformity of the fuming. It seems to be virtually impossible to over fume or over develop latent prints on items. All surfaces of items seem to have an even amount of superglue vapor reach them, even if their outer surface is not readily exposed to the vapors. As far as disadvantages, the pumps are a lot more expensive than the simple chambers that can be used with the heat and humidity method. Dye staining must be used most of the time to visualize the latent prints, but there is some question as to whether this should be done all the time with more traditional methods anyway. Superglue fuming under a vacuum certainly seems to be an option worth considering for the future of latent print processing.

## Bibliography

- Ashbaugh, D. R. *Quantitative-Qualitative Friction Ridge Analysis: An Introduction to Basic and Advanced Ridgeology*, CRC Press, Boca Raton, 1999; pp 118-122.
- Board, T. W. (1993, May) *The Cyanoacrylate Vacuum Fingerprint Development Method Utilized by the Metropolitan Police Department* [Online]. Available: <http://home.att.net/~pavtonscientific/page35.html> (2001 August).
- German, E. *Superglue Fuming Tips* [Online]. Available: <http://www.onin.comlfp/cyanoho.html> (2001 August).
- Grady, D. P. Cyanoacrylate Fuming: Acceleration by Heat within a Vacuum. *J. For. Ident.* **1999**, 49 (4), 378-387.
- Lee, H. C.; Gaensslen, R. E. (eds.), *Advances in Fingerprint Technology*, Elsevier, New York, 1991; pp 68-70; 142-144.
- Watkin, J. E.; Wilkinson, D. A.; Misner, A. H.; Yamashita, A. B. Cyanoacrylate Fuming of Latent Fingerprints: Vacuum Versus Heat/Humidity. *J. For. Ident.* **1994**, 44 (5), 545-553.



**Dr Henry Faulds**  
(1843 - 1930)

Beith born pioneer of Fingerprint Science,  
Author and International Medical Missionary

Thank you for your kind donation towards  
establishing the first memorial to Dr Henry  
Faulds, in the United Kingdom in Beith, the town  
of his birth and formative years.



**Southern California  
Association of  
Fingerprint Officers**

*The names engraved on the sands  
Endure a circle of the clock;  
But one man in a million carves  
His name upon the solid rock.  
Immortality  
W.D. Cocker*

*Donald L. Reid*  
Donald L. Reid  
Secretary

Dr Henry Faulds - Beith Commemorative Society  
22 January 2004

*(In addition to a certificate (shown above), a letter addressed to Secretary Lawson (below) was sent as an acknowledgment.)*

Dear James,

Just a brief note to sincerely thank your president and members for their extremely generous donation towards achieving our objective of a memorial to Dr Faulds in the town of his birth. The idea of a fitting memorial in Beith was born at a meeting of Beith Historical Society in 1997 when a lecture on Henry Faulds was given by Dr Stewart, the great-nephew of Faulds.

The past two years have been spent trying to raise the necessary funds. I have to say at times it has been rather difficult, particularly when there was strong opposition to our preferred site near to the War Memorial. However, receiving the welcome boost to our funds from SCAFO does remind me that there are many other folk both at home and far from these shores, who share a similar vision.

Please pass on my thanks to everyone at SCAFO. They have given me a real boost to find the extra cash required to finish this project and publish a commemorative booklet which will contain the names of every individual and organisation who have helped. Our aim is to have the memorial in place for an official inauguration in June 2004.

Progress will be highlighted on our official web site ([www.henryfaulds.org](http://www.henryfaulds.org)) which is generously hosted for us by Alan McRoberts, himself from the fingerprint world. An official invitation will be forth coming when we know the date for the inauguration. I can't thank SCAFO enough.

Yours sincerely

*Donald L. Reid*  
Secretary

# Minutes of January Executive Board Meeting

**Date:** January 10, 2004

**Location:** Bruno's Restaurant - Restaurant Row in San Marcos

**Secretary:** Gina Russell-Durgin

**Called to order:** 1100 hours by Chairman George Durgin

## **Attendance:**

Ed Palma, Dennis Uyeda, Susan Garcia, Gina Russell-Durgin, Tom Washington, George Durgin, Lisa DiMeo, Craig Johnson, Sarah Watson, William Leo, James Lawson, Clint Fullen, Alan McRoberts. (Absent: Mari Johnson.)

**Executive Board Members Swear-In:** by George Durgin

## **New Business:**

Treasurer's Report by Jim Lawson:  
Financial Statement for 2003:

2003 Training Conference Report

2004 Training Conference:

Tentatively to be held in same location as 2003.

Craig Johnson and Susan Garcia assigned as commercial exhibitors committee.

George Durgin and Gina Russell-Durgin assigned as the speakers committee.

Editor's Report by Alan McRoberts:

Annual cost \$7,924.69 (The Print and SCAFO website)

As a cost savings, a private bulk mailing service is being tested.

Certificate Program Status:

LASD board members doing majority of footwork. No input or suggestions received by active members from published announcement. Extensive input and suggestions made by board members at this meeting.

Operational procedures to be documented and brought to the board for approval.

Additional input for the tenprint program requirements and test design are needed.

President Palma suggested a separate meeting after the whole package has been put together. Board members agreed to meet at 1500 hours, prior to the February dinner meeting, to discuss these certification programs further. (That meeting did not occur.)

2004 Meeting Schedule (dates subject to change):

February 7 - hosted by Lisa DiMeo

April 3 - Past Presidents Night, hosted by George Durgin

June 5 - hosted by Mari Johnson and Sarah Watson

August 1 - hosted by Craig Johnson and Susan Garcia

October 1 & 2 - Annual Training Conference

December meeting - hosted by Dennis Uyeda  
(November discussed as a viable option to avoid Christmas conflicts).

Charles Wolford Memorabilia:

Chairman of the Board George Durgin was contacted by Wolford's grandson who has items that he wants to donate to SCAFO. Historian Leo will contact him directly for further information.

Durgin announced that Wolford's grandson and his 80-year-old mother (Wolford's daughter) plan to attend the Past Presidents Night meeting in April. Durgin suggests we attempt to contact as many past Presidents and Wolford Award recipients as possible to make this meeting even more eventful. All members with knowledge of the whereabouts of any past presidents or Wolford Award recipients were asked to make those contacts to request their presence at this meeting.

Bylaws Updates by Clint Fullen:

Parliamentarian Fullen discussed a suggestion for changing the mail-in ballots.

President Palma directed the editor to publish a notice regarding future nominations and that voting will take place at the training seminar.

President's Issues:

President Palma requested that Clint Fullen review the wording of all bylaws and to report the findings to the board. Palma designated Susan Garcia for the Nomination Committee Chairman.

SCAFO database updates:

Steve Tillmann has turned over the assigned responsibility of maintaining the database file to the secretary.

Donation to the Dr. Henry Faulds - Beith Commemorative Society:

Dennis Uyeda proposed the making of a \$500 donation to the society. Alan McRoberts seconded the motion. All were in favor. (Treasurer Lawson sent a check. See page 10 for acknowledgement.)

Scholarships:

Tom Washington inquired about existing scholarships and was advised there is currently nothing in the works. Craig Johnson was appointed to draft a proposal for scholarships to attend the training seminar.

Merchandise:

Susan Garcia will look for possible ideas for SCAFO items to sell. Bill Leo suggested making an inquiry regarding custom shirts and skirts.

**Meeting adjourned at 1530 hours.**

## President's Message

The February meeting was held at the Cask n' Cleaver Steakhouse in Fallbrook which is located in northern San Diego County. The restaurant is a rustic, western-style, wood structure nestled in the Fallbrook foothills, a place one would not expect to serve up tango dancing lessons, but patrons were there on the dance floor doing the tango while the SCAFO meeting was held in the next room. Nearby are two Native American reservations, Pauma and Pala, both with Las Vegas-style hotels and casinos. I spoke to one of our SCAFO members who stayed at one. She commented that it was nice, clean, and very much Las Vegas without the hassle of driving to Las Vegas.

The evening's speaker was Stephen L. Plourd, Retired California Highway Patrol Officer. Stephen's qualifications and experience have been recently focused toward Accident Reconstruction. Stephen presented two case examples of vehicle accidents where reconstruction of the scene helped to collaborate witnesses' statements or provided vital clues to sort out misstatements or confusions as to what actually occurred at the accident scenes. This type of investigation is necessary to provide expert witness testimony in criminal and civil court from a different perspective or view point. I equate Stephen's investigations to what we might call peer review. The review may agree with the initial investigation or it may not. My thanks to Lisa DiMeo, our host, for providing an interesting topic and speaker. Although we had a problem with our PA system during Stephen's presentation, it was resolved later before the actual SCAFO meeting. My apologies to Stephen for the audio problems. Mr. Durgin, our 2003 and 65<sup>th</sup> president and audio coordinator, assured me this would not happen again.

There were about 60 SCAFO members in attendance, including seven past presidents. The door prize gifts were provided by our host, Lisa DiMeo, who added a little personal touch to each gift. Just a quick reminder that the Sergeant of Arms collects \$1.00 and the pink chip that contains your registration number you receive when signing in at the door. The monies collected go toward the door prizes. The chip is just another way of tracking the number of attendees. Please make sure that if you invite a guest to attend with you at one of our meetings, payment arrangements (who will pay) are made between you and your guest prior to attending any meeting so there is no confusion.

Our next meeting will be hosted by Past President George Durgin at Camp Pendleton's Staff NCO Club. Camp Pendleton is a military Marine base located between San Clemente and Oceanside. Since it is a Past President's meeting, George has stated he would like to make it a memorable one. Just exactly what he has in store is not known at this time. You'll just have to attend.

I want to acknowledge a recent new friend whom I have met before on a couple of occasions at my department. His name is Chuck Russell, and he will be sworn in as an Active member at his next meeting. In his second reading, Chuck jokingly stated that he "Would be an ASSET to SCAFO". If you regularly attend meetings, you know what I mean by "jokingly". But here is a fellow who was not joking. After the meeting, Chuck approached me and said, "Ed, I have some photographs of interesting cases that I think would be of interest to present." Needless to say, I also think Chuck is going to be an asset. I look forward to hearing Chuck speak at one of our meetings. I challenge other SCAFO members who have pledged in front of the membership that they, too, were going to be ASSETS to the Organization to fulfill that pledge in one way or another. Chuck has taken that first step by saying, "I would like to be a speaker at one of our meetings." Thank you, Chuck! I'm looking forward to that day.

*Fraternally Yours,*

*Ed Palma, President*



**Upcoming  
SCAFO Meeting**

**April 3, 2004**

Past Presidents' Meeting  
A Historical Tribute to  
SCAFO Presidents & Welford Awardees

**South Mesa Club  
Camp Pendleton Marine Corps Base**

For additional information contact:

George Durgin  
(310) 971-2302  
Durgin@scafo.org

Visit the new Fingerprint Society website  
[www.fpsociety.org.uk](http://www.fpsociety.org.uk)

A new discussion group hosted by  
 Fingerprint Society editor David Charlton  
 is also available at:  
<http://groups.yahoo.com/group/aridgetoofar>

*A few other useful sites regarding our profession:*

**Pacific Northwest Division International Association for Identification [www.pnwdiai.org](http://www.pnwdiai.org)**

Visit their "FP" (Fingerprint Stuff) link for a listing with links to their publications or send an email to [Jon.Stimac@state.or.us](mailto:Jon.Stimac@state.or.us) to be added to his monthly distribution list.

**Kasey Wertheim's website [www.clpex.com](http://www.clpex.com)**

Visit the "Detail" archives, or sign up for a Weekly Detail, and don't forget to check the Chat Board.

**Ed German's website [www.onin.com/fp](http://www.onin.com/fp)**

An abundance of information!!!

It should be noted that the Boy Scouts of America Fingerprint Merit Badge Booklet has been updated (last revision was 1983). *Thanks to Ed German for his contributions toward this most worthwhile effort.*



***"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."***

For subscription or membership information, or address corrections contact:

***- President Theodore Roosevelt, 1908***

**S.C.A.F.O. Gina Russell-Durgin, Secretary**  
 Escondido Police Department

700 West Grand Ave.  
 Escondido, CA 90235  
 (760) 839-4770

\$20.00 yearly subscription (attendance required for membership)  
 \$30.00 yearly for International Subscriptions

**C.S.D.I.A.I. Ricardo Tomboc, Treasurer**

710 North "D" Street  
 San Bernardino, CA 92401  
 (909) 384-5701

\$25.00 yearly membership

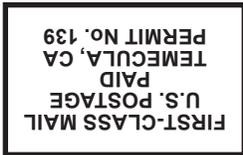
**I.A.I. Joe Polski, Chief Operations Officer**

2535 Pilot Knob Road, Suite 117  
 Mendota Heights, MN 55120-1120  
 (651) 681-8566 [iaisecty@theiai.org](mailto:iaisecty@theiai.org)  
 \$60.00 yearly membership



First Class Mail

Return Service Requested



S.C.A.F.O.  
PO Box 893789  
Temecula, CA 92589-3789

*In This Issue*

- pg.
- 1 Prisoner Confesses to 1965 Killing
  - 2 Man Who Escaped Louisiana Prison Guards in 1978 Caught in Compton
  - 2 Man Freed in 1997 Shooting of Officer
  - 4 A Blow to the Credibility of Fingerprint Evidence
  - 5 Brenda van Dam Visits Escondido Kiwanis
  - 6 Advancement in Latent Print Processing: Vacuum Cyanoacrylate Fuming
  - 7 Letter from Dr. Henry Faulds - Beith Commemorative Society
  - 9 Minutes of January Executive Board Meeting
  - 10 President's Message

---  
SCAFO Members  
get "yourname@scafo.org".  
See instructions on the  
website's email page.

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

- April 3, 2004 *S.C.A.F.O. Meeting Past Presidents' Night*  
George Durgin  
USPHS
- April 7 - 9, 2004 Nevada State Division 4th Annual Conference  
Las Vegas, NV
- May 10 - 13, 2004 C.S.D.I.A.I. 88th Annual Conference  
Sacramento, CA
- June 5, 2004 *S.C.A.F.O. Meeting*  
Mari Johnson & Sarah Watson  
LASD
- August 7, 2004 *S.C.A.F.O. Meeting*  
Mari Johnson & Sarah Watson  
LASD
- August 22 - 26, 2004 International Association for Identification  
St. Louis, MO
- October 1-2, 2004 *S.C.A.F.O. Training Seminar*
- December (TBA) *S.C.A.F.O. Meeting*  
Dennis Uyeda  
CAL-DOJ

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