Crime Scene Investigation & Forensic Evidence

Dr. Henry C. Lee
Professor, University of New Haven
Chief Emeritus, State Police Forensic Lab
Director, Research & Training Center
50 years of Criminal Investigation
Assisted 42 Countries

Investigated Over 8000 Crime Scene
TSUNAMI

南亞海嘯
死亡人數料增至5萬，風暴直撲泰國

鴉片風災 慘過
Police Shooting
Killings to be studied

These cases are among those expected of state and local authorities. The authorities are looking at similarities among the unsolved during the past few years.

Name: Mary Shirley
Age: 29
Date Found: July 15, 1987

Baribeaut
Stavinsky

Lee Links Suspect, Slayings In City

By Tina A. Brown

In captivating testimony Monday, noted forensic scientist Henry Lee testified that Matthew Steven Johnson is a serial killer who buried Alive
Lessons Learn from Cases
Scene → Lab → Court
Strengthening Forensic Science in The United States: A Path Forward

NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES
Power of Observation
Additional imprints with a multi-circular, the Puma-type pattern developed near the victim’s body. The light blue imprints in the center of the photograph were barely visible prior to treatment with bloody print enhancement reagent.
KIDNAPPED

Elizabeth Smart
Age: 14  Height: 5’ 6”
Weight: 105  Hair: Blonde

REWARD FOR SAFE RETURN
Information Hotlines
801-799-3000
800-932-0190
Forensics Expert Arrives to Aid Smart Probe

BY KEVIN CANTERA

The Salt Lake Tribune

New Clues?

Nationally renowned forensics expert Henry Lee, who owns his own lab in Virginia Beach, was considered a prime suspect in Elizabeth Smart's abduction.

Lee, who has worked on high-profile cases such as O.J. Simpson's trial and Chandra Levy's murder, was recently hired by the Smart family to assist in the investigation.

Lee has worked in law enforcement for 35 years and has a reputation for being thorough and diligent.

He has already visited the Smart family's home and has taken photos of the surrounding area, looking for any clues that might have been missed.

Lee has also interviewed the Smart family members and has asked several questions about the abduction.

He has promised to keep the Smart family informed of his progress and has assured them that he will do everything in his power to find the truth.

Lee has been working with the Salt Lake Tribune and has agreed to provide updates on the case as they become available.

The Smart family is grateful for Lee's expertise and hopes that his involvement will bring them closer to the truth.
Kidnapped teen found alive, well

ELIZABETH SMART BACK HOME 9 MONTHS AFTER ABDUCTION

‘Miracles do exist,’ teen’s uncle says as family reunites in joy

2 suspects are jailed after people call police in Sandy, Utah

Salt Lake City -- Elizabeth Smart, whose 10-year-old
girl was kidnapped from her bed by an unknown
man on June 5, 2002, was returned to her home in
Salt Lake City on Saturday. She was reunited with her
family in private. "We are grateful," said Dr. Edward
Smart, Elizabeth's father. "Elizabeth was unaware
of anything that had been going on."
New evidence
Examination of the body of Joyce McLain, victim of 28-year-old homicide, yields surprising results

McCain chooses Palin
Governor sports small-town roots

BY STEVE QUINN
AND CALVIN WOODWARD
THE ASSOCIATED PRESS

JUNEAU, Alaska — In two short years, Sarah Palin moved from small-town mayor with a taste for mooseburgers to the governor’s office and now — making history — to John McCain’s side as the first female running mate on a Republican presidential ticket.

She has more experience catching fish than dealing with foreign policy or national affairs.

Talk about a rocketing ascent.
Documentation of the Scene

Scene Documentation
- Photography
- Notes
- Sketches
- Video Taping
- Audio Recording
Crime Scene Photographs

July 20, 1993
Latent Lift from Eyeglasses
New Crime Scene Theory

Macroscopical Scene

Microscopical Scene

Universal Scene
Electronic Mail, Chat Room
- Images
- Deleted images
- Fax
- Copier
- Printer

- Phone numbers
- Names
- E-mail
- Text messages
- Voice recorder
- Credit Cards
- Bank Records
PRESERVATION OF EVIDENCE

AVOID:

• Contamination
• Decomposition
• Deterioration
Nov 22, 1963

JFK

President John Kennedy Assassinated in Dallas
Lee on JFK assassination:

Lee, a consultant to the lawyers who defended O.J. Simpson against murder charges, told a federal review board there were flaws in the autopsy procedure, adding some key materials had also disappeared. "The original suit was not handled properly," Lee said in an earlier interview Tuesday.

But Lee declined to comment on whether the federal Assassination Review Board had not yet released all final reports.

Lee was asked to review fresh information gathered by the board, appointed by Congress in 1994 to assemble and re-examine public records about Kennedy's assassination.

Lee said the lack of a reliable autopsy record and a breakdown in the chain of custody of evidence are major hindrances in any criminal investigation.
DNA = JFK + Connally?
DNA = JFK or Connally?

Any Biological Materials on Bullet?
On July 16, 1973 Penny Serra was murdered in Macy’s Parking Garage in New Haven. Four suspects were developed through witness identification and police investigation. None of them were prosecuted due to lack of evidence. 30 Years later Mr. Grant was identified and convicted of the killing through re-examination of DNA and Fingerprint evidence.
Old box may be vital in slaying

Serra murder suspect's future could be decided

By Christa Lee Rock

NEW HAVEN — The box of fluffy pink tissues looked like it had been hit by a truck. A flap of its cardboard casing tumbled to the floor. A prosecutor pulled another crumbled panel from an envelope so a judge could review its 28-year-old markings.

But this sad, crushed box could help decide the fate of Edward Grant, the Waterbury man about to stand trial in the 1973 murder of Concetta “Penney” Serra.

Its torn panel holds what prosecutors believe is Grant's fingerprint, and photos place the once-pristine tissues in the back seat of Serra's Buick Electra.

But Grant's team of three public defenders is challenging the admissibility of the tissue box and potentially dozens of other pieces of evidence prosecutors may use in a trial set to begin this spring.
ERRA: DNA expert says it’s Grant’s blood

In Wednesday, Ladd and Assistant State’s Attorney G. Clark attempted to
of blood spatterings. The lab’s
director, Elaine Pagliaro, testified
Wednesday that two ‘Type O spots
also turned up on the back of Ser-
vial of blood labeled “E. Grant” to
two snippings from the handker-
chief.
The test was a gamble. Longer
strands of DNA tend to break with
blue plastic gloves before han-
dling the cloth in court. Ladd said
such outside genetic material can
cause “mixing,” or the appearance
of more than one person’s DNA in
said.
So they tested again,
in August 2001. They
more samples from the
holy bank.
ARREST IN SERRA MURDER CASE

New clue pointed to alleged killer

Affidavit puts Serra suspect in city July 16

By Helen Bennett Harvey
Register Staff

NEW HAVEN — For months, blood and a fingerprint pointed to the Waterbury man accused of killing Concetta "Penney" Serra 26 years ago, but it was a key clue uncovered last week that may have cemented the case by showing the suspect did business here at the time of the slaying.

Edward R. Grant, 56, was
Stage I
Scene

Stage II
Lab

Stage III
Court

Recognition
Documentation
Collection
Preservation

Evaluation
Examination
Interpretation

Presentation
Reconstruction
Summation

CSI
Detective
Forensic
Scientist

Forensic
Scientist

Lawyers
Judges
3 killings shock Valley

Police quiz kin in deaths

DERBY—Valley residents were recovering today from the shock of an apparent triple murder that was discovered late Saturday in a quiet neighborhood not far from Route 8 in Derby.

Peggy Ferrara, 32, discovered the gruesome slayings of her adoptive mother, Mary Ferrara, 72, her adoptive brother, Joseph Ferrara, 44, and her eight-year old daughter, Nina Ferrara, in Mary Ferrara's home at 528 Emmett Ave.

All three bodies were viciously slashed, The Sentinel has learned.

Derby police, who were called to the scene by Peggy Ferrara, immediately sealed off the house and turned the in And police declined to say if she was in custody today. However, she could not be located.

More than 40 state and Derby police officers are conducting an around-the-clock investigation in an attempt to apprehend the killer or killers of what has been described as one of the most brutal killings in the history of the Valley.

Although police have released no details, The Sentinel has learned that Mary Ferrara's body was found in a hallway on the first floor of the story-and-a-half Cape Cod house.

The body of her son was discovered in a bathroom with the shower still running. The child's body was found in a downstairs bedroom, wrapped in a blanket.

According to state police, Nina...
Transient Evidence
Transfer Evidence
Pattern Evidence
Continued from Page 1

The senior Joseph Ferrara suffered a fatal heart attack about 10 years ago.

His widow, a registered nurse, worked for many years at Griffin Hospital until her retirement. She has been active as a volunteer at the hospital for the past several years.

Her granddaughter was to have attended the third grade at Irving School later this month. A source reported that Ferrara was planning to move to Florida, where her birthplace is located, although school officials had not been officially informed of any plans to withdraw from school.

The youngster was well known in the Hawthorne Avenue neighborhood and was often seen riding her bicycle. She was a constant visitor at the Derby Neck Library.

On Sunday, Derby and state police went house-to-house in teams throughout the neighborhood in an attempt to uncover any evidence that might have a bearing on the crime.

The entire block in which the Ferrara home is located between Mountain Street and Colt Street was blocked to traffic. State police brought in a tracking dog in an attempt to ferret out any leads that would be helpful in solving the crimes.

The investigation is being directed by Sgt. Roland Harrigan, according to Sgt. Scott R. O’Mara, public relations officer for the state police.

The Major Crime Squad van was used for processing evidence. Dr. Henry Lee, internationally-known forensic expert from the state police crime laboratory, and a large number of his staff were at the scene throughout the day.

A command post was set up in aldermanic chambers, and headquarters and special lines were run into the building. Use of the investigation was facilitated by the state medicineman’s station wagon and Farmington for autopsies.

State and Derby police have any information anyone who might have been in the area Saturday night to contact the police by calling 735-7811.

Throughout Sunday, police were seen going into the command post in City Hall to give state police. Police questioned Ferrara at length. She could not be reached for comment this morning.

The only other immediate survivor of the family is Carol Viola of Fairfield.
As of 11 a.m. today, police were continuing an intensive investigation to find the killer or killers responsible for the triple deaths, Sgt. Scott O’Mara, a state police spokesman, said.

Dr. Henry C. Lee, state police forensic expert, and other state police are evaluating forensic evidence gathered at the scene, but have not indicated how close they are to solving the crime or making an arrest.

The triple killings were discovered by Peggy Ferrara, 32, of 350 Hawthorne Ave., Derby, at 11:50 Saturday. Her daughter, Nina, ...
No clues in triple slaying

Neighbors shocked as police intensify inquiry into motive

By DEBRA ADAMS
Courant Staff Writer

DERBY — More than 30 state and local police officers are investigating the stabbing deaths of an 8-year-old girl, her grandmother and her uncle, state police said.

Despite the increased manpower, there was little progress in the investigation of the Saturday night slayings of Mary Ferrara, 72; her
Condition?  

Time? Working?

Transfer (Trace) Evidence

Blood
- Human
- Victim

Hair
- Human, Body
- Suspect

Fiber
- Gray Nylon
- ?

Tissue
- Skin
- Suspect
Methods of Enhancement
Imprint Evidence

<table>
<thead>
<tr>
<th>Condition</th>
<th>Type</th>
<th>2-D or 3D ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood</td>
<td>Tissues</td>
<td>Fibers</td>
</tr>
<tr>
<td>Hairs</td>
<td>Soil</td>
<td>Debris</td>
</tr>
</tbody>
</table>

Identification

Documentation

Enhancement

Suspect Known

Comparison

Forensic Analysis

Individualization
Roseboro guilty in triple murder

Derby man could face death penalty

By Marianne V. Stochmal
Staff Writer

MILFORD — Derek Roseboro was convicted of capital felony murder Friday and could face the death penalty in the stabbing deaths of a Derby woman, her son and her 8-year-old granddaughter during a burglary in their home in August 1989.

"The offenses in this case are the most serious in our criminal code," said Judge Hugh C. Curran. He presided over the three-judge panel that found Roseboro, 37, of 228 Emmett Ave., Derby, guilty of killing his neighbors Mary Ferrara, 72, Joseph Ferrara, 46, and Nina Ferrara, 8.

Their bodies were found in Mary Ferrara’s house at 228 Emmett Ave. in staging designed to be tried by the judges' panel instead of a jury. He has until Wednesday to choose whether the judges or a jury will decide if he gets the death penalty or life in prison without parole.

"The court finds that the state has proved beyond a reasonable doubt all the allegations ... in each of the counts," Curran said. Roseboro also was convicted of three counts of murder and one count of first-degree burglary.

The panel, which also included Judges Philip E. Mancini and Samuel S. Freedman, deliberated 12 hours over three days. The decision was unanimous.

At least 12 relatives and friends of the victims crowded together into two rows of the courtroom in Superior Court as word spread that the panel had reached its verdict.

Carol Viola, daughter of Mary Ferrara and Nina Ferrara’s aunt, burst into tears and buried her face in her hands as the decision was read.

Nina Ferrara’s mother, Peggy Ferrara, had left her daughter overnight with her grandmother the night of the murders. Peggy Ferrara has moved out of state. Joseph Ferrara, who was blind and retarded, lived with his mother.

Roseboro, who appeared nervous as he was led into the courtroom, stared straight ahead as he heard the verdict.

State’s Attorney Mary M. Galvin said the state will ask for the death penalty.

"The judges obviously thoroughly reviewed the evidence, and they took their time and obviously weighed every facet of the case and came to a just and proper verdict," Galvin said.

Galvin credited Derby police and

Carol Viola, a relative of the victims, waits others before the verdict is announced.
State of Connecticut

GENERAL ASSEMBLY

Official Citation

Introduced by
Senator Gary A. Hale of the 13th District
Representative Vincent J. Tenucci of the 104th District

Be it hereby known to all that:
The Connecticut General Assembly
hereby offers its sincerest congratulations to:
DR. HENRY LEE

in recognition of

YOUR DILIGENT WORK FOLLOWING
THE RECENT TRAGEDY IN DERBY.

The entire membership extends its
very best wishes on this memorable occasion
and expresses the hope for continued success.

Given this 25th day of October, 1949
at the State Capital
Hartford, Connecticut

by

President Pro Tempore

Speaker

Secretary of the State
King of crime scenes

Henry C. Lee: "While they're (criminals) in prison they learn from each other."

Famous forensics doctor teaches Truckee Meadows

"48 Hours," has worked nearly 5,000 homicide cases, he said.

Lee's expertise is in recreating the crime scene from blood splatters and other forensic clues.
Willimantic Padilla Case

11 years old Angelica Padilla was last seen delivering newspaper in the afternoon of August 13, 1998. Her body was found in a wooded area behind The Forster Drive housing complex next day. She died of blunt force trauma. Her throat has been slashed. After two weeks of intensive investigation, Torres, 29 yrs old, was arrested and charged for the crime.
Police Focus On Tools In Slaying Probe

PUBLIC SAFETY COMMISSIONER Henry Lee ducks as he enters a crime scene in Willimantic, near where the body of Angelica Padilla, 11, was found earlier this month. Holding up the tape is Willimantic Police Chief Milton King. Lee examined the scene and asked for the public’s help in solving the crime.
New technology links stain on victim to accused killer

By DEBORAH A. McLEOD
Special to the Bulletin

DANIELSON — Expert witnesses testified Thursday that the DNA found on Angelica Padilla’s shorts matched that of her accused killer Jose Torres.

The DNA extracted from a semen stain on the belt loop of Padilla’s shorts, which at first was thought too small to test conclusively, recently was analyzed by the FBI and Connecticut forensic laboratories using a state-of-the-art DNA testing procedure that wasn’t available in 1998 when the murder occurred.

Mitochondrial testing differs from the more common nuclear DNA testing. It analyzes a different part of the DNA molecule that can be replicated easily to create more material for testing from tiny amounts. It cannot conclusively identify an individual but can include or exclude someone based upon their maternal, mitochondrial DNA lineage. Newer mitochondrial DNA tests also can work successfully with contaminated samples and have a higher sensitivity level than previous versions, making obtaining a result from the samples more likely.

Mitochondrial DNA testing now is used in almost every forensic laboratory in the United States since its inception in 1996, and has been used successfully in court in cases when direct evidence is sparse, such as Tennessee vs. Paul Ware. Ware was convicted of raping and killing a 4-year-old girl after mitochondrial DNA testing showed a hair in her throat belonged to him. It also is used in disaster and anthropological testing, and has recently been employed in identifying remains in the World Trade Center attack.
Angelica never returned home from delivering newspapers the afternoon of Aug. 13, 1998. Her body was found about 12:30 a.m. the following day in a wooded area behind Torres’ apartment building. Her throat had been slashed and she wore only underpants, a T-shirt and bra. Her feet were bare.

Angelica died from blunt force trauma to the head and sharp force injury to the neck, according to court records.

Less than two weeks after her body was found, police arrested Torres — a friend who lived in the same Foster Drive housing complex as Angelica — in connection with the slaying. Torres, 29, faces charges of capital felony and murder. If he is convicted, prosecutors will not seek the death penalty; instead they plan to seek a sentence of life without the possibility of release.

On Monday, a state criminalist testified that fibers found on the body of the victim were similar to fibers from a green blanket and a fiber found on a pair of jeans. The blanket and jeans were seized from Torres’ apartment. Police found the jeans in a bathroom hamper, and the blanket was among a pile of items on Torres’ bedroom floor.

While Angelica’s body was still at the crime scene, investigators used an ultraviolet light source that, illuminated fibers on her body and helped them find two green, acrylic fibers in Angelica’s hair — one at the hairline and another deeper in her hair, according to Virginia Maxwell of the state forensic science laboratory.

Maxwell also testified that a dark green wool fiber found on the back of the shirt Angelica wore when her body was discovered was similar to a dark green, wool fiber found on the pair of jeans from Torres’ apartment.

A comb seized from Torres’ apartment also contained a green, acrylic fiber that was similar to those found in Angelica’s hair and on the jeans found in Torres’ apartment.

Under cross-examination, Maxwell said no known head hairs from Torres were found on the victim’s clothing or her body.

The trial resumes Thursday.
Henry C. Lee Testifies In Torres Murder Trial

By DIANE STRUZZI
COURANT STAFF WRITER

NELSON — Renowned forensic scientist Henry C. Lee took the witness stand Friday as the state rested its case in the capital felony trial of the man accused of killing a Willimantic newspaper girl in 1998.

Lee testified that he marked and collected slides of key sites involved in the investigation into the death of 11-year-old Angelica Padilla, Lee explained to jurors in Danielson Superior Court the significance of selected pieces of evidence and his opinions on the sequence of the crime.

Angelica never returned from her newspaper route at the Willimantic apartment complex where she lived in August 1998. Jose Torres, 29, a friend of Angelica’s family who lived in the same apartment complex, was arrested and charged with capital felony and murder.

Less than a day after Angelica disappeared, police found her body in a wooded area behind Torres’ apartment building. She was clad only in underwear, a T-shirt and bra. Her head had been beaten and her throat slashed.

Her sandals and black shorts were found in the basement of Torres’ apartment building, as was a piece of white plastic that investigators later determined had Angelica’s blood on it.

Lee, who was head of the state’s forensic science laboratory and commissioner of public safety, was the final witness for the prosecution in its third week of presenting evidence.

The defense Friday tried to prevent Lee from testifying, questioning the methodology he used in his reconstruction of the crime. In a sharp exchange with defense lawyer Patrick Culligan, Judge Jose Q. Koletske rejected the request.

Lee, who conducted a partial reconstruction of the crime scene, said he believed the basement was the primary location of the crime since her shorts, sandals and the piece of plastic were found there. Angelica was usually delivering newspapers in the vicinity of Torres’ building at about 4:15 p.m., during the timeframe in which authorities believe the crime occurred.
Henry Lee Testifies In Torres Murder Case

By DIANE STRUZZI
COURANT STAFF WRITER

TILTON — Renowned forensic scientist Henry took the witness stand Friday as the state rested in the capital felony trial of the man accused of a Willimantic newspaper girl in 1998.

Weaving plots of key sites involved in the inquiry into the death of 11-year-old Angelica Padilla, explained to jurors in Danielson Superior Court yesterday, it recognized the significance of selected pieces of evidence and his concern on the sequence of the crime.

AREAWIDE

Angelica never returned from her newspaper route at Willimantic apartment complex where she lived in 1998. Jose Torres, 29, a friend of Angelica’s family who lived in the same apartment complex, was arraigned and charged with capital felony and murder.

Less than a day after Angelica disappeared, police found her body in a wooded area behind Torres’ apartment building. She was clad only in underpants, a T-shirt and bra. Her head had been beaten and her throat cut.

Renowned forensic scientist, the final witness for the state, says evidence shows that 11-year-old Angelica Padilla most likely was killed in the basement of Torres’ apartment building.

Her sandals and black shorts were found in the basement of Torres’ apartment building, as was a piece of white plastic that investigators later determined had Angelica’s blood on it.

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Lee, who conducted a partial reconstruction of the crime scene, said he believed the basement was the primary location of the crime since her shorts and sandals and the piece of plastic were found there. Angelica was building at about a distance from which authorities believe.

Her body was taken to the scene. The amount of semen was the site where he noticed the position indicated a sexual intercourse, he said.

A stain on the back of Angelica for semen was transferred or indirectly, Lee testified. DNA analysis indicated the stain.

But to complete the human history and within a short time, Lee said cross-examination he could not eliminate an earlier crime saying that human remains could remain on fabric.

Lee also acknowledged that crime could not be eliminated a separate location from where there was blood.

None of Torres’ claims have evidence for Angelica’s blood.

The defense later in his statement.
Prosecution rests in Torres trial

By DEBORAH A. McLEOD
Special to the Bulletin

DANIELSON — The prosecution rested its capital felony case against accused killer Jose Torres Friday with a crime scene reconstruction by forensic expert Dr. Henry Lee.

Lee, the Connecticut Commissioner of Public Safety at the time of Angelica Padilla's homicide in August 1998, testified about the evidence found on the 11-year-old's body and in the basement of the building in which Torres lived.

Under questioning from State's Attorney Patricia Froelich, Lee placed the victim and accused at the same location the day of the murder.

"The victim was found up the hill, 86 feet away from building 14," Lee said while showing a slide of Padilla's body. "She appeared to be adjacent to a little path, surrounded by very dense growth. Someone would have to be familiar with the area to know the path was there."

Padilla's mother, Milagros Cuevas, left the courtroom to avoid the graphic slides, while Torres, 30, sat expressionlessly.

State and FBI testimony was presented Thursday conclusively linking semen found on Padilla's clothes to Torres' DNA.

"Semen has to be fresh to transfer to another surface," Lee said. "It dries quickly so it has to be a very short period of time."

Lee said the lack of dirt or debris on Padilla's bare feet meant she had been placed in the wooded area and that the lack of readable fingerprints on Padilla's body wasn't a rarity.

Lee added that the lack of blood on Padilla's lower torso, legs and feet meant that she had been laying down when her throat was slit and the pool of blood under her head meant it had happened where her body was found.

The defense refuted Lee's theories on several fronts, including the location of the original crime scene and when the semen got on Padilla's shorts. Public Defender Patrick Culligan asked Lee when the semen was deposited onto the shorts and when Lee answered, "Probably less than 20 minutes after it was ejaculated," Culligan countered with a question poised to instill doubt.

Under Culligan's questioning Lee said dried semen could on fabric for a long time.

Culligan offered other possibilities for the crime, including that Padilla was attacked elsewhere than the basement and that someone other than the attacker could have placed the sandals and shorts in the basement.

"Past study of criminal behavior and psychology shows there is a want to be exposed," Lee said, "We would take the time to take the sandals and shorts and then dispose of them in the basement and have possibly seen them when it have been easier to hide them in the woods than take a chance."

The defense will begin its testimony on Tuesday in Danielson Superior Court with testimony expected to last for four days.
Torres guilty in slaying

The mother of the 11-year-old victim cries with joy at Torres' conviction.

By DEBORAH A. MCLEOD
Special to the Bulletin

DANIELSON — It took three and a half years to bring Jose Torres to trial for the vicious murder of an 11-year-old papergirl.

But it took a jury only three and half hours of deliberations to convict the 29-year-old Williamantic man of murder and capital felony in connection with Angelica Padilla.

After going into deliberations late Friday, the jury returned Monday morning at 10:35 a.m. The verdict was announced shortly thereafter.

Torres will be sentenced Monday in Danielson Superior Court.

He likely will get life in prison, as the state did not seek the death penalty in the case. Capital felony calls for either death or life in prison.

Cuevas sobbed as the jury foreman read aloud the verdicts in both counts.
PSL man found dead in garage

Police treating death as suspicious

Mark Pollio
TRIBUNE STAFF WRITER

PORT ST. LUCIE — Police are calling the death of a 46-year-old Minorca Avenue man suspicious after finding him lying naked, face-down in the garage of his

Minorca Avenue has seen its share of major crimes

Mark Pollio
Autopsy shows dead man was beaten

Mark Pollio
TRIBUNE STAFF WRITER

PORT ST. LUCIE — A 46-year-old man found dead in his Minorca Avenue home Monday was beaten repeatedly over the head with a blunt object, according to an autopsy, but police refuse to name the suspect in the case.

“We have a very good idea of who the particular person is that did this,” said Port St. Lucie Deputy Chief Scott Bartal, “but right now, we are not willing to say who that is.”
AGING CONTUSIONS

- Red-blue to Purple
- Blue – Brown
- Green – Brown
- Green – Yellow
- Yellow – Brown
- Tan
- Yellow
IN THE CIRCUIT COURT OF THE
NINETEENTH JUDICIAL CIRCUIT
IN AND FOR ST. LUCIE COUNTY,
FLORIDA

CASE NO. 99-3355-CF

STATE OF FLORIDA,

Plaintiff,

vs.

SUZAN BARRATT,

Defendant.

_________________________/

VIDEOTAPED DEPOSITION OF DR. HENRY C. LEE

DATE:    July 31, 2000
TIME:   1:45 p.m.
PLACE:   100 East Ocean Boulevard
          Stuart, Florida
TAKEN BY: Attorney for Defendant
Manslaughter charge dropped after ruling

The case fell apart when a judge excluded a woman’s confession in her fiancé’s death.

By Molly Hennessy-Fiske
Palm Beach Post Staff Writer

FORT PIERCE — Prosecutors said they plan to drop a manslaughter charge today against Suzan Barratt after Port St. Lucie police discovered the body of her fiancé bruised and bloody in the couple’s garage.

Assistant State Attorney

Circuit Judge Robert Makemson ruled Sept. 15 that Barratt’s statement to police Oct. 4, in which she confessed to fatally striking fiancé Stephen Haines, was the result of an “unusually coercive situation” in which she was effectively in custody without being advised of her Miranda rights. Barratt
Defense ‘ecstatic’ over decision

MANSLAUGHTER
From 1B

attorney when she asked for one and noted that other officers told her to wait in a police car or at the department when she was free to leave.

Defense attorney Richard Kibbey pressed to have the confession, as well as clothing, fingernail scrapings and a blood test taken during the interview, thrown out. Mirman said it was likely all evidence would have gone the way of the confession.

Soon after prosecutors attempted to notify him of their decision, Kibbey said he was “ecstatic” and relieved they decided to drop the charges.

situations like this,” he said of Port St. Lucie police.

Kibbey brought in several medical experts to examine the crime scene police found at the couple’s Minorca Avenue home Oct. 4, including large bloodstains left throughout the house by Haines, 46, who suffered a blood disorder due to chronic alcoholism.

Treasure Coast Medical Examiner Frederick Hobin ruled the death a homicide, but Dr. Henry Lee — a forensic pathologist and criminologist who assisted in the O.J. Simpson and Jon-Benet Ramsey cases — called it natural. Miami-Dade interim Medical Examiner Joseph Davis also found fault with Hobin’s conclusions.
New Advances in Forensic Science

- Reagents react with Heme
- Reagents react with Protein
- Reagents react with Elements

Detection Instruments
- X-ray, radar, Body Heat Imaging
STRESS
Forensic Scientist
Prosecution
Defense
Court
Media
Prosecution
Community
Standards
Press
Victim
Ego
Police
Forensic
Judge
Court
Ethics
Media
Limitation
Uncertainty
Boss
Science Neutrality

Different Option

Ideological Bias

Reasons for Modification
BIASED WITNESS
(Prosecution Witness)

HIRED GUN
(Defense Expert)
FALSIFIED LATENT PRINTS...CONTINUED

The September 1981 issue of "Identification News" reprinted a newspaper article from The Providence Journal telling of the falsifying of latent print evidence by the Chief of Police of Hopkinton, R.I.

The October 17, 1981, edition of the same newspaper states that Ex-Chief Donald E. McCumiskey was sentenced to a year’s probation. Judge Francis J. Ball of the U.S. District Court told McCumiskey that even with the sanctions for public assistance...
Forensic Specialist Charged With Perjury

FAIRMONT, W.Va., July 22 (AP) — A former state police chemist suspected of linking defendants to crime scenes by fabricating or misrepresenting evidence in more than 100 cases across West Virginia was indicted by a state grand jury today on charges of lying in one of them.

The indictment of the 43-year-old former chemist, Fred Zain, followed an order by the West Virginia Supreme Court last year requiring review of at least 134 cases in which, the court said, Mr. Zain might have offered false evidence. But the grand jury’s action today represented the first time that he had been criminally charged.

The indictment charges him with three counts of perjury in lying, as a witness at a murder trial here in Fairmont three years ago, about his education, his fees for testifying and a chemical test that the indictment said he had never performed. The defendant in that trial, which involved the slaying of two elderly women in 1989, later pleaded guilty.

Each of the three counts against Mr. Zain carries a maximum sentence of 10 years’ imprisonment upon conviction.

A person familiar with the case, who spoke on condition of anonymity, said the defendant’s whereabouts were unknown.
WASHINGTON — The Justice Department has identified about 3,000 criminal cases that could have been affected by flawed science and skewed testimony at the FBI laboratory before 1997, and is letting prosecutors who handled those cases decide whether defendants should be notified.

To date, government officials said they are aware of between 100 and 150 cases in which prosecutors decided to alert defendants of problems they concluded were material to their verdicts. None has resulted in overturned convictions, they said.

One of those cases already has reached the Florida Supreme Court. The court last week ruled that convicted murderer George Trepal was not entitled to a new trial despite evidence the FBI’s chief toxicology chemist gave inaccurate testimony. The identification of cases and prosecutorial reviews are the final stages of a scandal that rocked the FBI during the mid-1990s when a senior chemist at the famed crime lab went public with allegations of shoddy work, tainted evidence and skewed testimony.

A Justice Department internal investigation concluded in 1997 that 13 lab technicians made scientific mistakes.

FBI and Justice officials say they continue to review cases handled by those technicians to determine if there are problems that could have affected verdicts. But they say the lab today is much different after a series of changes designed to ensure scientific and forensic analyses are subjected to checks and balances.

"I had confidence in the results of FBI laboratory exams even prior to 1998 but today my confidence level is even higher after the quality review process we have implemented," FBI lab director Dwight Adams said in an interview.

Those changes, Adams said, include a requirement that all lab examiners’ work be reviewed first by another technician with the same expertise, then by a supervisor. In addition, the lab has earned and maintained accreditation from the scientific community every year since 1998, and it just moved into a new 500,000-square-foot state-of-the-art complex.

Despite the changes, some criminal defense lawyers are concerned by the Justice Department’s decision to let federal, state and local prosecutors decide whether to notify defendants of problems.

"That’s like asking the fox to guard the hen house," said former federal prosecutor Neal Sonnett. He
Lessons from History

Montana
West Virginia
Louisville
Cleveland
Oklahoma

Impact of a Pathologist’s Misconduct Ripples Through West Texas Courts

Forensic Specialist Charged With Perjury

FALSIFIED LATENT PRINTS...CONTINUED

Second Man Freed From Jail Because Evidence Was Faked

A man who was convicted of beating an elderly man unconscious has been set free after a retrial in Idaho, N.Y., that focused on state police efforts to fabricate fingerprint evidence against him.

Mark Prentice, who served six and half years in prison for burglary and the assault of an 81-year-old man, is the second person to be free as a result of a state police evidence-tampering scandal that has led to the conviction of four troopers.

George M. Denton, the Tompkins County District Attorney, said he was “disappointed but not surprised” by Mr. Prentice’s acquittal, which he said was “exquisite.”

Montana
West Virginia
Louisville
Cleveland
Green
Oklahoma
Gilchrist

Melnikoff
Zain
Gregory
Green
Gilchrist
Strengthening Forensic Science in The United States: A Path Forward

NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES
Traditional Forensic Identification

- Fingerprint
- Palm print
- Bullet & Casing
- Tool marks
- Shoeprints
- Footprint

Paradigm Shift in Forensic Identification

- Bite marks
- Lip print
- Ear print
- Hair comparison
- Handwriting
- Signatures
### General Characteristics, Resultant Attitudes and Beliefs, and Deviant Behaviors of 36 Sexual Murderers

#### BACKGROUND CHARACTERISTICS

<table>
<thead>
<tr>
<th>Family Background</th>
<th>Individual Development</th>
<th>Performance</th>
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</thead>
<tbody>
<tr>
<td>Detachment</td>
<td>Dominance of fantasy</td>
<td>School failure</td>
</tr>
<tr>
<td>Criminality</td>
<td>History of personal abuse</td>
<td>Sporadic work record</td>
</tr>
<tr>
<td>Substance abuse</td>
<td></td>
<td>Unskilled employment</td>
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<tr>
<td>Psychiatric problems</td>
<td></td>
<td>Poor military record</td>
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<tr>
<td>Sexual problems</td>
<td></td>
<td>Solo sex</td>
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<tr>
<td>Inconsistent discipline</td>
<td></td>
<td></td>
</tr>
</tbody>
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#### RESULTANT ATTITUDES AND BELIEFS

- Devaluation of victim and society
- World viewed as unjust
- Authority/life viewed as inconsistent
- Autoerotic preference
- Obsession with dominance through aggression

#### DEVIAN'T BEHAVIORS

- Rape
- Mutilation
- Torture
- Murder
Examination of Evidence

- Recognition
- Documentation
- Enhancement
- Comparison
- Individualize
- Reconstruction
Science is no always black or white
Identification
Not Match is Easy
LATEST NEWS

Man Convicted In 1980 Murder

2:03 PM EDT, August 19, 2003
By KATIE MELONE, The Hartford Courant

NEW BRITAIN -- A jury found Omar R. Ali guilty this afternoon of murder and manslaughter in the 1980 stabbing and strangulation of Newington High School guidance counselor.
PERIODIC BACKGROUND REMOVAL
12 Points Match

1: 1,000,000,000,000,000?
15 Strations Match
The equation for determining T is set up as before, except that diatomic nitrogen is now included.

\[ E_{\text{total}} = mC_p(T - T_r) + mC_p(T - 373\,^\circ\text{K}) + mC_p(T - T_r) \]

\[ \text{carbon dioxide} \quad \text{water vapor} \quad \text{nitrogen} \]

806,387 joules \( = (44\,\text{g})(1.393\,\text{j/g}^\circ\text{K})(T - 273\,^\circ\text{K}) + (36\,\text{g})(931\,\text{J/g})(T - 373\,^\circ\text{K}) + (210.7\,\text{g})(1.298\,\text{j/g}^\circ\text{K})(T - 273\,^\circ\text{K}) \]
Evidence ?
Issues with Statistical approach to Forensic Evidence

- Crime Scene Evidence vs Laboratory Evidence
- The Nature & Types of Physical Evidence
- The unique issues with forensic evidence
- Inclusion, Exclusion & Consistent with
- Degree of Similarity
- Product Rule: $P = P_1 \times P_2 \times P_3 \ldots$
- Speculation, Logic deduction or Scientific fact
UTILIZATION OF FORENSIC EVIDENCE

Association: SUSPECT

Prove: STATEMENT

Inculpatory: EVIDENCE

Identification: MATERIALS

Confirmation: INFORMATION

Dissociation: Disprove

Exculpatory: Individualization

Developing Leads
Criminal Justice System
Confidence, Trust of Citizen

Truth
Justice

THE FORENSIC SCIENTIST
Discrediting the Science

Discrediting the Scientist

Demeaning the Witness
- A View From The Bench
- Acting as a Non-Disclosed Expert: Moving the Goal Posts
- Communication In the Courtroom: How Experts Can Excel
- Correspondence Between Expert Witnesses and Counsel: Traps, Minefields, and Other Potential Disasters
- Dealing Effectively With Retaining and Opposing Counsel: Avoiding Abuse
- Direct Examination and Experts: How Experts Can Excel
- Discrediting the Truthful Expert Witness: How to Best Prepare for the Onslaught
- Effective Use of Computer Graphics By Experts: Cost-Effective Techniques That Work
- How Attorneys Really Select Experts: The Impact of Expertise, Experience, Reputation, Writing, Speaking, Marketing, Expert Witness Services, and Other Criteria
- How Lawyers Cross-Examine, Impeach, and Destroy Expert Witnesses
- How to Stand Up Under Cross-Examination and a Daubert Hearing
- Maintaining Your Integrity and Credibility In the Face of the Adversarial System
- Making the Complex Understandable: What Works for Expert Witnesses
- Marketing and Building a Forensic/Expert Witness Practice: Cost-Effective Techniques That Work
- Persuasiveness of Expert Witnesses:
If all else fails

Lower your standards