A WOMAN…
A PRIVATE FORENSIC SCIENCE LABORATORY…
A JOURNEY

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California Association of Criminalists

Founder's Lecture

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Jennifer Mihalovich asked me to give this talk quite some time ago. Initially, I said no. We had a very serious discussion one evening… And she talked me into it… Wine may have been involved!

CAC initiated the Founder's Lecture in 1983 with speakers Jack Cadman, Joe Orantes and Tony Longhetti. Over the years, every 18 months or so, our meetings included a Founder's Lecture. And throughout those years there has been only one woman, and she was British, Margaret Pereira in 1994. So I am honored to be here with you, only the second woman to give this presentation and the first American woman, after 38 years. That is not only a striking fact, it is a disappointment. I should not be the second woman at this podium. There are numerous pioneering female leaders in the field of forensic science who have a story to tell. Some of their voices are silenced by death, but others are around you. Not only here in California but throughout the country if not the world. I challenge you to find them, invite them and hear their story.

In addition, I begin this presentation with an interesting fact:

> *The careers of the women that I am going to mention, including myself, are all PRE-OJ, which means PRE-CSI, BONES, and NCIS. We were all forensic scientists before being a forensic scientist was cool. It was before everyone in the world knew who we were and what we did. It was before expectations were that our testing could begin and finish in less than an hour.*
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> *The OJ case and TV fictional Crime Scene series have had a positive effect on our profession. At last, the general public has learned about forensic science. More and more young scientists have chosen this as their career and more and more women have entered the field. In fact, I've read estimates that 60%+/- forensic scientists are now women! But I digressed…*

I was clearly not the first woman in this field, far from it. Although there were few, there were women in the field of forensic science beginning in the 1920's: Frances Glessner Lee, Mary Louisa Willard, and Mary Elizabeth Cowan to name a few.

Frances Glessner Lee[1] **(**1878-1962) was sometimes called the (God) Mother of Forensic Science. Her specialty was designing/building dioramas of actual crime scenes – Nutshell Studies of Unexplained Death. Born in 1878, she was home schooled. But she was also the heiress of a fortune from her father who owned International Harvester which allowed her to learn, design and build the crime scene dioramas, a career that began in the 1930's. In the 1940-50's she hosted seminars on homicide investigation.

Mary Louisa Willard[2] (1898-1993) was known as "Lady Sherlock. Mary obtained her Chemistry degree from Penn State in the 1920's, her PhD from Cornell in 1927. She returned to Penn State and was a professor there from 1938-1964.

Mary specialized in micro chemical analysis using IR, UV spectroscopy, Mass Spec, GC, NMR and crystallography. She was an early proponent of examinations of hair, and of blood on murder weapons. She also performed ballistics examinations, tire track comparisons, and soil analyses . In other words, although she was a chemist, she was a Generalist in our field.

Mary Cowan[3] **(**1907-1998) obtained her B.S. at Denison University in Ohio in 1929 and later obtained a degree in Medical Technology at Mt. Sinai Hospital in 1936. She took postgraduate courses in biochemistry, immunology, and physical chemistry at Western Reserve University in Cleveland. In 1939 she became the Supervisor of the Trace Evidence Section at the Cuyahoga County Coroner's office in Cleveland, Ohio where she remained in that position until 1995. She lectured at Western Reserve University in the Law Medicine Center to both lawyers and medical students.

You may be familiar with Mary's legacy due to the Mary E. Cowan Outstanding Service Award in the Criminalistics Section of AAFS. Mary was famously known for her crime scene work with Dr. Samuel Gerber in the Sam Shephard case in Cleveland

1 Frances Glessner Lee, Brief Life of a forensic miniaturist: 1878-1962, Laura J. Miller, Harvard Magazine, Sept-Oct 2005

2 Mary Louisa Willard, Wikipedia.org

3 Selected Testimony of Mary Cowan in Sam Sheppard's 1966 Murder Trial, Famous Trials, Professor Douglas O. Linder

Ohio, 1954. The pair was famous for the crime scene processing and analyses in this historical case which also involved a California scientist, Dr. Paul Kirk. Her ABO analysis of various bloodstains from the crime scene were inconclusive.

Mary Cowan testifying

Mary Cowan hired me in 1976, my first job in my forensic science career. My memory of Mary is a woman with a very professional demeanor exhibited consistently each day.

In the 1960s and early 1970's other familiar women appeared in the forensic science field in California. I have selected four of them to tell brief stories about each of their beginnings in forensic science. I think that you will detect a common theme about women entering a profession dominated by men. These examples bracket my entrance upon this career.

Jan Bashinski[4] obtained her B.S. in Chemistry and in 1964, a master's degree in Criminalistics from Univ. of California Berkeley under Paul Kirk. Jan went to work at Oakland Police Department under John Davis in 1964. Upon John's retirement in 1977 Jan became the Laboratory Director, the first female laboratory director in California. She was the first female President of CAC in 1977. Remember that the CAC was founded in 1953, 24 years earlier.

4 Jan Bashinski Eulogy, CAC News.org/training/abstracts/2004-Fall

Dorothy Northey[5], who retired from Contra Costa County Laboratory, obtained her masters in the same U.C. program in 1968. Dorothy shared her story with me:

> *During her first job interview, the panel didn't ask a single question about criminalistics. They just wanted to know if she ever had or would take part in a demonstration. Her response was if it was something she cared deeply about she might. That honest response prevented her from getting the job.*
>
> *She worked for at Richmond PD from 1966-68. Then she moved on to Alameda County laboratory for a year 1968-69 where she recalled that Bob Cooper begrudgingly hired a woman so he wouldn't lose the position funding. In only a year, she moved on to Contra County Co. where she worked and thrived until her retirement.*

Sandy Wiersema[6] was hired at OCSD in 1973 and was there until 1987. She moved on to San Diego Police Department and ultimately ended up at the FBI lab in Washington.

> *Sandy's story: In 1971 she learned about the Master's program in Criminalistics at Cal State LA and she enrolled in 1971-72. There she met Chuck Morton, Jack Harris, and Tony Longhetti. Each of them became her mentors. Sandy described an interview in Los Angeles. The interviewers clearly weren't interested in hiring a woman.*
>
> ***Interview Questions**: 1.) Could she could exchange huge carboys of water that were located on high shelves in the lab and 2.) What would she do if she had to examine brakes on a car?*
>
> ***Her Responses were** to 1.) At a criminalist salary, they should be able to find someone else to exchange the carboys and to 2.) She would have a qualified auto mechanic examine brakes. That was the sum of her interview. No Job.*

5 Personal communication
6 Personal communication

During my preparation for this presentation, I talked to Mary Gibbons[7], retired OPD Crime Lab Director. She told me:

> *When she applied for her first job in criminalistics at San Francisco Police Department in 1978, then lab director Shoji contacted Jan Bashinski to ask if he should hire a woman. At that point, Jan had two other women working at OPD, Marty Blake and Debbie Madden. She though Shoji's question was so ironic. She replied, "Shoji, do you know who you are talking to???" He replied, "Yes, but you are different!" He ended up hiring Mary.*

So these few short histories spanning different eras describe women in Forensic Science from the East Coast, in the Midwest and California. I don't know what barriers that Mary Louisa Willard, Frances Glessner Lee or Mary Cowan faced. But through their own stories, I have learned that Dorothy Northey, Sandy Wiersema, and Mary Gibbons were initially challenged in the male dominant field. I am certain that the few other women in our field in those early years faced similar discrimination.

Interestingly, in the 68 years since the 1953 founding of CAC, there have been only 15 women Presidents of the organization. Jan Bashinski was the first (1977), Faye Springer (1987), Sandy Wiersema (1989), Carole Sidebotham (1991), Mary Gibbons (1994) and Carol Hunter (1995). CAC should be proud that this old trend has faded.

NOW, FINALLY TO MY BEGINNINGS

To understand how I ended up as a private practitioner in forensic science and/or why I thought that I could make this leap to open my own laboratory you will need to hear a bit about my beginnings. It was an interesting and unique time in our field. I was lucky to have been part of this journey.

My husband Phil Moon likes to ask people to tell the story of the fork in the road that lead to their career. Either I had a lot of forks, or I just jumped onto a round-about and skipped off from time to time!

So I believe that there can be numerous events that lead one to a career. For example, I took a short bypass during my college education. This would foreshadow my future desire for not only science, but also business skills. I went to college my freshman year and did exceptionally well. However, then I told my parents that I thought I should quit and just get a job. They wouldn't let me just quit. I was given the option of going to a one-year business school. I lived in the Barbizon Hotel for Women at 63rd and Lexington. No men were allowed above the mezzanine level, it was 1972 after all. I got a job after graduation at The Cleveland Clinic in the Department of Education interacting with the heads of each specialty, medical students, interns and residents. That job inspired me to go back to college and earn my degree in Biology. And both the business education and job provided me with a skillset that added to my biology degree.

My degree was in biology from Mount Union College, at which I was a legacy from at least four generations before me. I was pre-med however, by my senior year my advisor was extremely concerned because I had not applied to any graduate or medical schools. He suggested that I try out a new program/internship in the laboratory of a police department. I interned for two semesters in the Stark County Sheriff Crime laboratory in Canton, Ohio. The lab director, Fred Martin, held a sworn position. The only forensic scientist was a graduate of John Jay. My personal copy of Crime Investigation by Paul Kirk was a gift from Fred Martin.

It was during that internship that I learned about the Cuyahoga County Coroner's office and began applying for a position before my senior graduation. The Coroner at that time was Dr. Samuel Gerber and the Trace Evidence laboratory manager was Mary Cowan.

Finally, I think I pestered Mary Cowan so much that she convinced Dr. Gerber to give me a job…$7000/yr. and my Forensic Science career began, 1976.That opportunity required that I begin working a couple weekends a month prior to my graduation. On those weekends, I attended some of my first autopsies and loved learning from Dr. Lester Adelson, the lead pathologist with quite the macabre sense of humor.

Forensic Science testing in the mid-70's in this country was quite different from today. The testing performed at that time was TMDT or trace metal detection pattern on victim hands in firearm cases, the Greiss test for nitrites on clothing, ABO on autopsy whole bloods, hair comparisons and the body examinations prior to autopsy if requested by the pathologists. My first assignment from Mary Cowan was to work on an old unsolved case examining hairs from the body and crime scene…but

7 Personal communication

the twist was, she wanted me to do comparative scale counts only. I soon learned the futility of this examination.

It took me less than six months to realize that (even in 1976) $7000/yr. doesn't come close to allowing independence from living at my parents' home. I approached Mary Cowan, she spoke with Dr. Gerber and I was called into a meeting in his office. He asked my financial concerns. I explained that one cannot live independently on $7000/yr. His response was "Then, honey, ask your father for money".

I quit a week or so later even though I had no job to go to. Less than a year later (1977), I learned of a regional forensic laboratory in Lake County Ohio that had acquired LEAA money to hire another forensic scientist. This laboratory was founded in 1973 with LEAA funding. I went to work at the Regional Forensic Laboratory which was then under the direction of Dr. Phillip Bouffard, a Questioned Document Examiner.

In 1977, there was not much of a female presence in law enforcement, the RFL laboratory or the Prosecuting Attorney's office. I needed to earn their respect. Over time I earned that respect by working on their cases, processing crime scenes, attending the monthly detective meetings, and training the Rape Crisis Center on evidence collection.

However, in my first year at RFL, I also experienced a colleague sexual predator. I travelled to another regional laboratory in Youngstown to learn their ABO inhibition and Semen analysis methods. Until then, RFL had obtained a semen standard from that laboratory. I mentioned to him that our standard was out of date and we needed another one. The next thing I heard was him calling me from another room. When I walked in, he was physically exposed and asked me to "help". I was stunned. I froze. And I never went back. I did not tell a sole about that encounter until the recent ''Me Too" movement because I was so horrified and embarrassed. I mention it now to encourage any one of you to **never** keep such an experience secret.

Let me move on, to explain not only my 'history', but some of the forensic science community history in the late 1970's.

At RFL my duties were serological examinations, trace evidence analyses, tool mark comparisons, foot print comparisons, bloodstain pattern interpretation and crime scene processing. In other words, **I was a generalist**. In 1968 the federal government funded billions into LEAA or Law Enforcement Assistance Administration[8]. This program significantly funded training for forensic scientists (and actually the entire judicial and police systems) throughout the United States. As a result, I had enormous opportunities to broaden my forensic science education.

- Billions of $$ in federal aid to law enforcement
- Forensic Crime Labs increased from 100 to 300
- NIJ funded Brian Culliford's *The Examination and Typing of Bloodstains in the Crime Laboratory, 1971*
- Forensic Science Foundation grants funded Forensic Microscopy Workshops through McCrone Research Institute and the Electrophoresis Multisystem through SERI, late 1970's

Dr. Walter McCrone founder of McCrone Research Institute began forensic microscopy courses. Dr. McCrone was a strong advocate of Certification in Criminalistics. He dedicated much time and effort in forensic microscopy training in this country. In the end, I took Microscopy I and II, Soils, Fibers, Botanicals and Wood Anatomy over the course of multiple years, several of which were funded by LEAA prior to 1981. Some of these courses were in Chicago, but Dr. McCrone also took the classes on the road and came to California.

Brian Wraxall obtained LEAA funds to train serologists in the Multi-System, electrophoresis testing of 8-9 genetic markers, which in theory could be done in one day (Ha). Later, not under the LEAA funding, he also offered the Semen Analysis system. This advancement in forensic serology took the typical lab testing of physiological fluids from simply ABO and possibly Rh on large pieces of bloodstain to at least 8 genetic markers, using 2 4-5mm bloodstain threads per gel. It was a giant leap forward. I attended both SERI courses and also the Genetic Marker course at the FBI Academy in Quantico, all by 1981.

Attending these numerous courses, I met many forensic scientists from all over the country, including California. It was at the 1981 AAFS meeting that I met Ed Rhodes.

8 The Evolution of Forensic Science: Progress Amid the Pitfalls, Joseph L. Peterson, Anna S. Leggett, Presentation at the National Conference on Science, Technology and the Law at Stetson University College of Law, September, 2005

Ohio to California 1981

Another overtly sexist experience occurred when I announced to the Prosecuting Attorney that I was getting married to Ed Rhodes and moving to California. He responded that he should never have let me attend courses at McCrone and SERI because I was leaving my job to go to work for them. His final comment was "I should just rape you." Don't ask me why he thought that was an appropriate comment, especially for an elected prosecuting attorney.

I arrived in California the summer of 1981 and learned that I had just missed an opening with LASD. I heard that LASD needed help implementing techniques from the SERI Semen Analysis System. I volunteered (yes that meant, work without pay!) at the LASD laboratory to implement and QC the P30 testing for the serology section.

California in the early 80's had three main private laboratories: IFS with Chuck Morton, FSA with Ed Blake and Peter Barnett and SERI with Brian Wraxall/Gary Harmor.

I was introduced to someone quite familiar to many of you, Chuck Morton. Chuck owned and directed IFS or the Institute of Forensic Science, a private forensic laboratory in Oakland. He was developing plans to open a Southern California branch of his laboratory and hired me for that position in early 1982.

Learning new business practices:

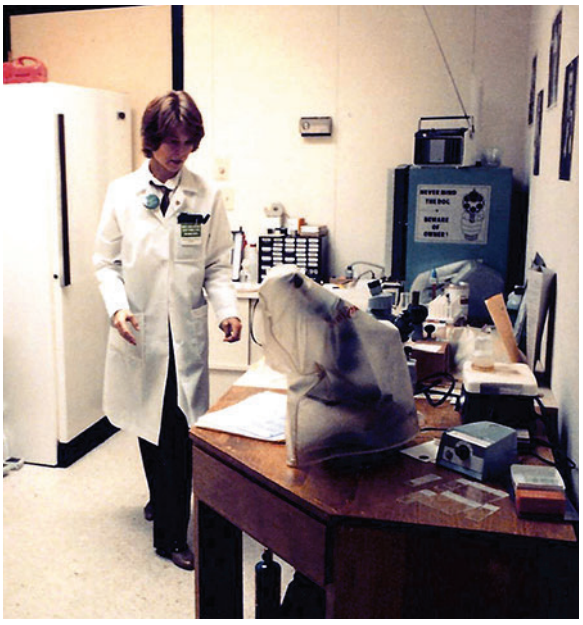
- Learning to Consult with clients and track billable time.
- Serological equipment - building the multisystem electrophoresis tanks from provided plans instead of purchasing them from SERI.
- Microscopy equipment - Only a stereo microscope for the trace evidence work was supplied. I owned an AO biological microscope and brought that to the lab. However I could do no polarized light particle/fiber analysis.
- Building relationships with colleagues in laboratories where I was asked to consult on their analysis/conclusions and/or repeat the analysis.
- Billings - At the end of the year, because most receivables were still outstanding, I was tasked with learning how to bill the Central and So. Cal counties.

I worked at IFS for a year. When that laboratory closed, I still had attorneys that were asking me to help them on criminal cases. I had learned how to bill most of the Southern California counties. And because for the second time, I had missed other job openings, I decided "Why not start my own private lab" to fill the void. Public Defenders and private criminal attorneys did not have a laboratory of their own. Although there were two private laboratories in Northern California, there were none in the southern part of the state at that time.

CAL LAB WAS BORN

Ed and I scraped money together, found a used laboratory equipment distributor, and made lab benches out of hollow core doors. I made my own electrophoresis tanks and bought a used power supply and a used cooling water circulating bath. We owned an AO biological microscope and found a used stereomicroscope.

There were early barriers to face. One, I was fairly new to California, was only starting to get to know my colleagues, and I wasn't a Cal Berkeley grad (the gold standard in those days) And two, quietly behind my back, colleagues thought that Ed was the one running the laboratory, even though he had a full time position at LASD. Of course, nothing could have been further from the truth. We could not discuss cases because of attorney/client privilege.



Initially, my laboratory was in our garage. It did not take me very long to realize that this configuration was unacceptable. I didn't want evidence at my home and I really didn't want clients knowing where my home was located. Instead I found a small office space in Tustin and set up the laboratory. This was in 1983.

Now let me discuss the costs of owning and operating a private laboratory. Have you ever considered starting your own laboratory? Have you ever thought about all of the components in the budget for the laboratory in which you work?

A government lab position does not require that you find, pay for, install, or maintain any of these required necessities. However, when I decided to start my own laboratory, all of this had to be financed and supplied by me. Could I afford everything all at once? Absolutely not. You prioritize what is necessary to perform the examinations and testing that you plan to offer.

I remember colleagues commenting that they wish they could make as much as my hourly rate. Our hourly rate had to be sufficient enough to pay for all expenses of operating a private practice. What are those expenses?

- Rent on office/lab space
- Clerical support/salary
- Office supplies
- Laboratory supplies
- Laboratory instrumentation, keeping state of the art
- Telephone system bills
- Health Insurance
- Salaries
- Training
- Professional Organization dues
- Technical library and journals
- Meeting expenses
- Travel expenses
- Bio Hazard disposal
- Outside Services expenses
- Advertising

The list is long, the totals are very high. So what I charged per hour was not money into my personal account. In fact, in all of the years in private practice, as with other private laboratory owners, I never had a salary equivalent to the salaries that I saw in the CAC Salary Survey every year.

THE GROWTH OF CAL LAB

A Full Service laboratory

Ultimately, the Cal Lab case categories were: arson, blood alcohol and BA blood typing, bloodstain patterns, combination/multi-category cases, firearms (outsourced), GSR, physiological fluids (serology), scene reconstruction, sexual assault, shoe/tire comparisons, toxicology (outsourced), and trace evidence. The company was full service.

Cal Lab Partners Steve Schliebe and Carol Hunter (1985)

In 1985, I entered into a partnership with Steve Schliebe from LASD. Steve offered services to the Cal Lab lineup that I didn't offer and enabled the laboratory services and revenue to grow. Among those were GSR, fire debris and blood alcohol. From 1986-1993+, the annual caseload was from 300-364 cases. Most of those years, the casework was divided between us although there were toxicology cases that we subcontracted out and firearms cases (by James Warner, retired from LASD). I don't know what your annual case load looks like, but I do know that at any one time, each of us could be balancing 20+/- cases.

In 1991, I decided to add to the staff. I hired Dean Gialamas as an intern, who was getting his degree from UC Irvine. When Dean graduated in 1992, he came on board as a full-time criminalist. His workload complimented and supported both mine and Steve's.

Numerous times I have mentioned our caseload but I haven't defined the type of cases that came into the lab. They were much like the cases in the government labs. We worked on rape cases, homicides including death penalty, arsons, automobile

Steve Schliebe, Carol Hunter and Dean Gialamas (1991)

accidents, and blood alcohol retesting. Our cases were predominately from public defenders/private defense attorneys, but also civil cases and private individual cases. We also worked for various county prosecutors around the state. We had a contract with Tulare County for their GSR cases. Also, when DOJ ceased doing GSR, we received many GSR cases from their agencies. We had cases from California, Oregon, Washington, Arizona, Missouri and Minnesota.

For the most part, we were court-appointed under the California Criminal Evidence Code[9] 720 and 722.

- 720 (a) A person is qualified to testify as an expert if he has special knowledge, skill, experience, training, or education sufficient to qualify him as an expert on the subject to which his testimony relates. Against the objection of a party, such special knowledge, skill, experience, training, or education must be shown before the witness may testify as an expert.
- (b) A witness' special knowledge, skill, experience, training, or education may be shown by any otherwise admissible evidence, including his own testimony.
- 722 a) The fact of the appointment of an expert witness by the court may be revealed to the trier of fact.
- (b) The compensation and expenses paid or to be paid to an expert witness by the party calling him is a proper subject of inquiry by any adverse party as relevant to the credibility of the witness and the weight of his testimony.

9 California Criminal Evidence Code, Article 1 Expert Witnesses [720-722]

Under the California Criminal code Section 1054[10], guidelines are defined about discovery both to and from the Defendant. Any work product by Cal Lab that would NOT be presented in testimony was not discoverable to the prosecution. Only that work product given in our testimony was made available.

Many of our colleagues felt that this rule was unfair because the government laboratories had to have full disclosure of their work product. However, in California, the Defendant has the right to investigate his/her own case without jeopardy to his/her case.

PROFESSIONAL RELATIONSHIPS

Colleagues and Clients

There are many other differences between private practice and a government laboratory. A private laboratory is only as successful as the people within it. Of utmost importance is the moral compass of the owner(s) and having that ethic imparted upon the employees. My company, California Laboratory of Forensic Science or Cal Lab had a motto "Honesty and Integrity". This was most important - to earn and maintain respect not only of clients but more significantly, of colleagues. If we didn't have a positive relationship with these analysts, if they distrusted the laboratory, our ethical standards and our competency, we would not have stayed in business very long.

How does one earn this trust/respect? The process is multifold.

- Obtaining comparable/identical training as colleagues and demonstrating competency.
- Participation and leadership in Forensic Science professional organizations such as CAC, MAFS, AAFS, ABC
- Casework: Although a private analyst is most often prohibited from discussing their analytical results in cases, discussions about case approach, methodology, conclusions and thought processes could be discussed.

Another extremely important prong for a private forensic laboratory is clients. There were some clients who were simply interested in whether or not the evidence analyses were done correctly and

10 California Code, Penal Code, Section 1054.1


Cal Lab Serology and Microscopy Sections

interpretations of the data were honest, fair, and correct. And then there were some clients who, once they heard our evaluation, strongly tried to shape the information to their advantage. That may be their job. But it is not our role, it was not my job to waiver from the scientific results. I had a client tell me once that I was too honest …I told him that was the greatest compliment. He, of course, was trying to insult me.

California Association of Criminalists

I joined CAC in 1981 and I remained very active in this organization for my entire career. In doing so, I got to know my forensic colleagues and they got to know me. Though I chaired multiple committees (ad hoc DNA on PCR Standards, Management Practices, Endowment, Historical, Genetic Marker Typing, etc.) several positions stand out for me.

I was the Membership Secretary for two terms. At each business meeting, we voted in our new members, applauded whether they were present or not and then let each new member drift off into the masses of our organization. This dismayed me. When I became President, I organized the New Member Reception. I invited board members and committee chairs to describe their positions and express their thoughts about CAC to these new members. Over the following years, I had members who told me that was inspiring, made them feel like they belonged and chose to become active on committees and/or the Board.

The Training and Resources committee had not established a clear objective, in spite of the name. As Chairman I decided that all of the information presented at study groups and at our semi-annual meetings needed to be recorded. At first, I used my own video camera to capture various talks at these meetings, or in-lab training. Eventually, I talked the Board of Directors into purchasing two video cameras, one for the North and one for the South. I began building a video library. It was a success and exists to this day.

CCI contacted me regarding funding for some of their training courses. The process was developed for T&R to survey the association for desired training needs, organize the funding request packages and submit this to the Endowment Committee. Because of this arrangement, another benefit to private laboratories arose. Prior to this, anyone from a private laboratory could not attend a CCI Course. However, once CCI was accepting funds from the CAC Endowment committee, this opened up training for all.

While Sandy Wiersema was President of CAC in 1989, she appointed me the chair of the ad hoc committee on PCR Standards in California. At that time, the rest of the country was focused upon RFLP technology but California was quickly embracing the importance of PCR technology. We were well into the process when I received a telephone call from Jim Kearney from the FBI Quantico Training facility. I knew Jim from 1981 when I was in a government laboratory and was taking his FBI Serology course in Quantico. His request: for the FBI to be a part of our committee. After arm twisting by Jan Bashinski, the FBI became a part of our process.

Private laboratories were prohibited from attending any FBI courses. Also, in the early years of the various TWG-committees, private laboratories were not represented; they had no voice in the development of these guidelines that would have a direct impact on their laboratories.

Scope of Client Consultation

Daily we received phone calls regarding possible new cases (PNC we called them). The attorney outlined the case, give what information they had at the time about the scientific testing and ask questions. It was not uncommon for us to gently redirect their questions toward more meaningful understanding. These points outline our case approach:

- Did you ask the right questions?
- What is the significance of the evidence in relation to the case?
- What kind of evidence do you expect?
- What does it mean? Strengths? Weaknesses?
- Is it unique?
- What type of association(s)?

We offered client training through Cal Lab seminars, in-service training for Public Defenders and in-service training for investigators. Cal Lab organized and held the first arson/fire debris dog and handler training in the State of California. This program was then taken over by John DeHaan from DOJ.

So what did we do in our casework? We offered reanalysis of the evidence, analysis of other evidence not previously tested, full case review including police reports, autopsy reports and photographs, crime scene photographs, all scientific evidence reports, notes, photographs, court preparation for attorneys on the strengths/weaknesses of the physical evidence. We included cross examination questions with the range of answers to expect, and at times, we could be seen sitting at the defense counsel's table with the attorneys and defendant. Not infrequently in homicide cases, we went to the crime scenes with the defendant's representatives to get a better perspective of the physical space, take additional photographs, measurements, etc. Reports were not always requested. In such cases, I required that we would write a "report to file" summarizing our findings and conclusions.

How did our reviews go? Did we find mistakes? For the most part, we did not find mistakes in the scientific case evaluations that we performed. But there were occasional mistakes and/or difference of opinion as to interpretation of the data. Was it to the advantage of the defendant? Sometimes it was helpful for the defense; many times it was not a bit helpful. One time as I reviewed a fiber case, the analyst concluded that a fiber was polyester. But the notes reflected the refractive index not of polyester, but of nylon. This case had been peer reviewed as well. The primary analyst was very experienced and I believe that the reviewer just didn't expect a mistake. But that is not what peer review is all about. Peer review is a quality control system to double check any and all analysts, no matter their level and experience.

A Few Major Cases

As I've mentioned, Cal Lab worked on many, many criminal cases. Some of the more well known cases were Randy Kraft, a serial killer of young men; Marvin Pancoast, killer of Vicky Morgan the mistress of Alfred Bloomingdale; Christian Brando who shot Dag Droilet – the boyfriend to his half-sister Cheyenne; and Bill Suff, a serial killer of prostitutes in Riverside County plus other counties in California. Cal Lab was hired by the OJ Simpson team as an independent laboratory site for two of their defense experts, Duane Dillon and Chuck Morton. While Duane and Chuck were working in my lab, Peter Neufeld and Barry Scheck called regularly to ask me how it was going. I reminded them that I was not their expert. Henry Lee wanted to use Cal Lab as a backdrop for a press conference. I told them absolutely not!

In 1985 the Randy Kraft case created a significant change in the policy of OCSD and the release of evidence to the defense. The prosecution would not release the evidence to the private labs hired by Kraft. Instead, they created a space within the OCSD laboratory for only the defense analysts. A Special Master was appointed (Duane Dillon) and placed in charge of all evidence requests and responsibilities. Multiple labs worked on this case within this one small room: SERI (Brian Wraxall), IFS (Chuck Morton), Cal Lab (Steve Schliebe). All of the equipment that was required had to either be purchased or leased. This was unprecedented and wasteful albeit required by the prosecution/judge. For months and months, each of the private lab analysts had to travel to OCSD to work on the case.

After that case, the OCSD laboratory per the Orange County District Attorney would not release evidence except for splits of bloodstains or sexual assault kits or blood alcohol samples. Instead, we had to look at the evidence within their laboratory, using their space, equipment, and supplies. There was no privacy of our analysis for the defendant. Over and over, I tried to get the attorneys to fight

the legal ramifications of this irregular process but strangely, not one would take up that battle. One case I was examining bloody clothing/shoes from a crime scene. I wanted to sample stains not previously tested. But in doing so, the lead criminalist on the case was watching my testing and would have had to approve my taking a sample. The end result was, after I left, he sampled the stains that I was interested in. Truthfully, I cannot remember the outcome of his tests but my point is, this process could have ended up detrimental to the defendant. Clearly this was against the defendant's right to his own private examination/testing.

There were times when LAPD laboratory would not release evidence at the request of a particular DA. This was not a lab policy, but one that originated from different DA's in different cases. But LAPD did have a strict policy that no private expert witness was permitted into their laboratory testing space. Now this was a very different policy that any other government lab that I ever interacted with. Because of that policy, when I examined evidence at LAPD, I was put in the evidence receiving dock. This room had a large garage door and places to dry out wet bloody clothing, significant drafts, poor lighting, and no laboratory equipment. I was expected to examine evidence with the same quality standards of any other government lab, yet I was placed in much compromised conditions. Don't forget, I had my own fully equipped laboratory not 40 miles away.

The Bill Suff case was the exact opposite in the way that Riverside DOJ handled the evidence. There were at least 15 different victims from 1974-1992. All evidence that we requested in each/every case was released to us. We bought shelves and dedicated half of one of our laboratory rooms the evidence storage. Because there were so many victims and an extraordinary amount of evidence, we created a searchable database for all of the evidence, evidence categories, victims, crime scenes, etc. This allowed us to cross reference evidence between each victim case. It was extraordinarily helpful in the trial preparation.

Now, do I think that any of these unusual policies for the release and examination of evidence was because I was a woman? No I don't. I was also aware that this same policy was imposed upon other private laboratories with men as owners. I'm addressing these examples for a different reason.

During much of this same time, crime labs throughout the country were preparing for and receiving ASCLD-LAB accreditation. Think about the strides that our forensic community has made to pursue quality work throughout this country. Can you imagine having these constraints put upon your analyses? Do you think such conditions would be acceptable for the accrediting bodies? Of course they would not be. Even before accreditation, these conditions would not have been acceptable for any of your laboratories. And yet, they were imposed upon us in the private sector. And in addition, we were held to a higher standard simply because we were working for the defense. This line of thinking existed even though Cal Lab also worked on cases submitted from various police and sheriff departments around the state of California.

Speaking of accreditation, yes Cal Lab was working toward accreditation. With great help from Dean Gialamas, many of our procedures/standards were prepared in early drafts. However, changes were happening at the lab.

FINANCIAL CHALLENGES

There are financial challenges faced running a private forensic science laboratory. When Cal Lab would be appointed on any particular case, we would give the client a quote for what was outlined as the casework/time/costs and ask for the judge to appoint us for that amount of money. As any case progressed, it was not uncommon to ask our client to obtain additional funding from the court. It was also not uncommon for the judge to cut our bills significantly, even though we had court ordered approval for the time/expense. They would do so at their own whim of what they felt the value of our work was in that case.

How do you run an operating laboratory when your revenues can be so adversely compromised? This was the struggle for all of the Cal Lab years… and I know for the other private laboratories in California.

In 1994, Steve Schliebe decided to return to LASD after nine years at Cal Lab. Dean had improved our GSR program and arson analysis. You may wonder why I didn't look for another criminalist to take Steve's place. One - he was a business partner, and I had to buy him out.

And two - I realized that the salary that we all were making was of no comparison to the salaries of all of the government laboratories in California

(the salary survey). And yet, our jobs carried, in my opinion, much more weight and stress. By this time, our cases were predominately murder, rape and death penalty. Because the caseload would require a senior criminalist, I didn't think that I could lure someone into private practice with a heavier caseload, billable time burdens, etc.

I moved Cal Lab to a less expensive location to minimize overhead. And I decided to add a new service to Cal Lab. Until that time, any DNA analysis that went through my laboratory was outsourced to FSA, Ed Blake/Peter Barnett's laboratory. The analyst I always chose was Jennifer Mihalovich. However, throughout the late 1980's-early 1990's, I had received additional training in PCR technology and I decided to add this service to the laboratory. Instead of developing this new service myself, I hired a young Criminalist who was in training at OCSD, Susie Goodhart. Susie was tasked with getting PCR technology online for Cal Lab.

Dean Gialamas came to me one day for a solemn discussion. Although he had much appreciation for his time at Cal Lab, learning case management, working on high profile cases, ability to obtain additional training and being encouraged to actively participate in professional organizations and time for research, even for a friend who's dog had been poisoned …he really wanted to be able to work crime scene processing from the beginning. To do so, he planned to go to LASD.

Here is a huge 'fork in the road' for me! Did I want to continue to (as a dear friend of my used to say) "Push the rock up the mountain"?

My decision was to stop.

HOW TO CLOSE A PRIVATE LABORATORY – End of 1996

Here I was again, facing a task that none of my private laboratory colleagues had faced.

- How do you close down an existing consulting/testing laboratory?
- What do you do with 13 years of case files?
- What do you do with all the evidence that was permanently checked out to the lab but might have forensic value during appeals?
- What do you do with all of the equipment and supplies accumulated over the years?
- How do you wind down the caseload?

I began by telling clients that Cal Lab would be closing.

We separated out all minor private cases and those criminal cases that were adjudicated. Those files would be shredded by a professional company with certificate of destruction.

I felt compelled to find a way for all of the evidence that remained in our property to make its way back into the original agency. Cal Lab had worked on habeas corpus cases and I knew that the evidence may be important. I contacted all laboratories from which I had splits of evidence/items permanently released to Cal Lab and asked them to take the evidence back.

I sold off all of my equipment with the exception of the polarized light microscope and the stereomicroscope. Ultimately, I also donated the Nikon Polarized Light microscope to Cal State LA's forensic science program

The Cal Lab Library was later donated to CAC and is housed at Cal State LA. This library is a collaborative one from me, Dean Gialamas and Ed Rhodes personal library.

Twenty to 30 boxes of case files went into storage. And then I was done.

Well not really. I was still Past President of CAC, on the Endowment Committee and Chair of the Historical Committee, and had to finish my term on the ABC Board of Directors.

Within 6 months, I received a phone call from Chuck Morton. He was now the lab director at FASI. Thanks to Chuck, I ended up on the FASI payroll for another four+ years and finally really retired in 2001.

"THE HEART OF THE MATTER"

In many ways, there could be no need for a private lab if all forensic laboratories were independent of law enforcement agencies. My philosophy has always been that our role is **to represent the evidence** - Not the police, not the prosecutor, not the defense attorney, not the victim or the defendant.

What is the significance of the evidence in relation to the case? Look at the results from an open point of view, not a limited scope that furthers a theory of the police, prosecution or defense. Explain the strengths and weaknesses, commonness or uniqueness, associations or no associations. All of this information should be included in each and every report. Your report should stand alone with all explanations of the evidence because there will be times that the report is your only testimony.

Take charge of your own professional development.

- If you are not involved, you should be.
- You don't have to be 'on the payroll' while contributing to your professional organizations
- Time and Expense for Professional training/advancement does not solely fall on the shoulders of your employer
- All of my time throughout my career was at my own expense. When you are in private practice, if you are not performing billable time, you are not making money. But your career is your commitment.

Upon my retirement, a colleague and dear friend wrote a kind note to me. He told me that whenever he was considering concluding his analysis on a case, these thoughts came into his mind "What would Carol do next?" I was deeply honored. This was one of the highest compliments I have ever received.

THERE IS LIFE AFTER FORENSIC SCIENCE

For those of steeped in the beginning or middle of your careers, this is not a concept that you probably even consider. I know that I didn't. I was far too immersed in my love of forensic science. But when I did decide to retire, I was uncertain of my future.

I enrolled into the Horticulture program and took classes at night for 1 1/2 years. Before completion, I started another business – JUST GARDENS, doing garden design/custom garden care. And along with that I ended up an assistant manager of a large garden center in LA. Interestingly, I put together a talk on *Forensic Gardening* and began speaking to gardening groups. An online national garden newsletter hired me to write articles.

One career door closed and another one opened. The sciences naturally overlapped. I was in heaven again!

Carol L. Hunter

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