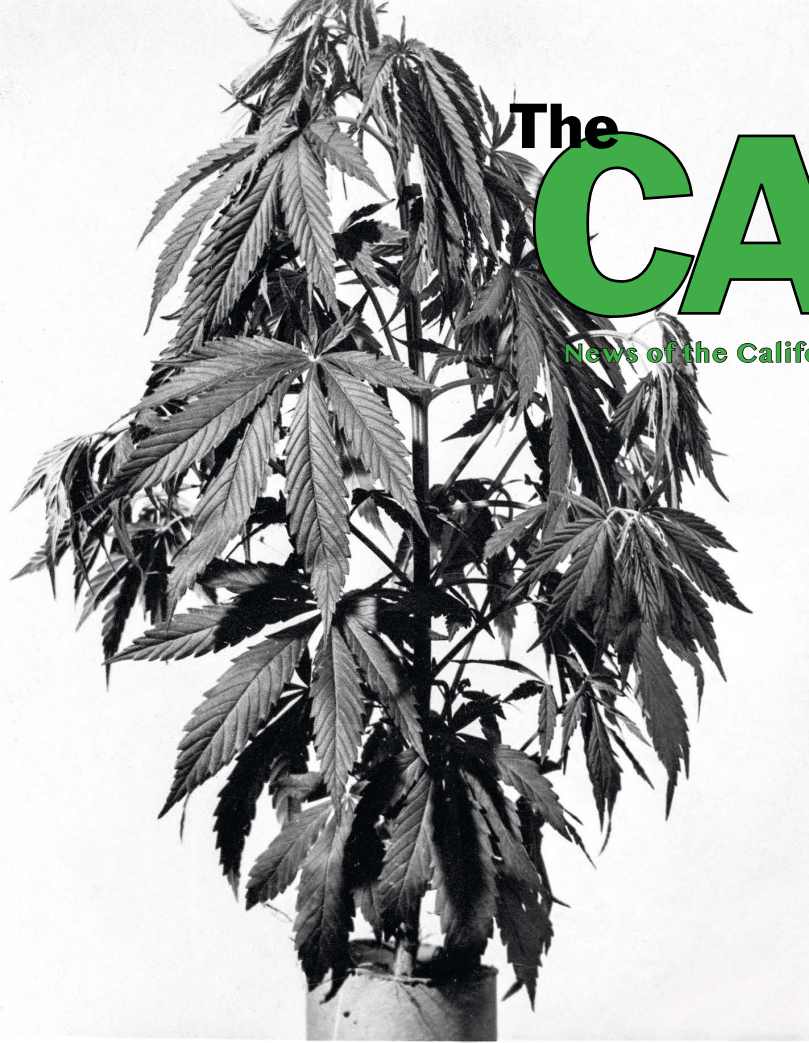


The

CACNews

News of the California Association of Criminalists • Third Quarter 2021



The President's Desk

catherine
Currier



CAC President

"It's like we are all peeking out from behind a slightly opened door to the outside, timidly lifting our faces to the sun, with big smiles on our faces."

A New Beginning

Hello fellow CAC members, allow me to introduce myself for those who don't know me yet. My name is Catherine Currier, and I am a firearms examiner. I like to be upfront about that, because I am not sure there are a lot of firearms examiners who are active in our organization. I'd like to change that! In fact, I would like to encourage all criminalists from every discipline to participate more actively in the CAC. I believe that when all disciplines work together and share ideas, we become better as people and as criminalists, and definitely, as an organization. But I digress a bit. I started working in the forensics field back in 2006. Prior to that, however, I was an unpaid intern conducting my thesis research from 2003-2005. In total, I've been in this field for approximately 18 years. During those years, the industry has evolved (mostly for the better!) due to changing accreditation standards and increased awareness of potential bias and how it could affect our work.

Speaking of change and this being my very first letter to all of you, I was contemplating what to write. It's been quite a year! As I was sifting through my past experiences during my career and especially this past crazy pandemic year, three themes struck me: *Reflection. Recovery. Resilience.*



Immediate Past President Jamie Lajoie (r) hands off the coconut to Catherine Currier.

Reflection

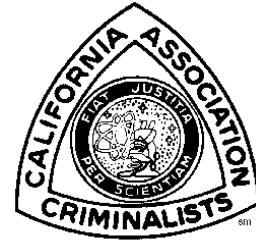
As I reflected on my career, particularly during this past year, I remembered how incredibly lucky I was to have great mentors that helped me in the beginning of my career (looking at you, John Murdock and John Nelson!). I was lucky to make life-lasting friendships with former and current colleagues who continue to provide advice when I need it. I feel grateful for the opportunities I was given to challenge myself and improve as a criminalist. And then, the Coronavirus pandemic arrived in the US in early 2020.

cont'd on page 4

THIRD QUARTER 2021

The CACNews

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Submissions should be made in the form of Windows compatible files on CD or by e-mail. Alternatively, text files may be saved as plain ASCII files without formatting codes, e.g. bold, italic, etc. Graphics, sketches, photographs, etc. may also be placed into articles. Please contact the editorial secretary for details.

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INSIDE

The President's Desk: "A New Beginning"	
Catherine Currier	2
Editor's Desk: "Summer is Here"	
Jonathan Charron	5
An Interview with Faye Springer	6
Perseverance—A New CAC Award	8
On Youtube: "Myths and Misconceptions about Microscopy"	
Video by Wayne Moorehead	10

"I reflected that without going into the lab to perform casework during this past year, I would not feel as grounded as I do."



CAC Board of Directors Meeting. (l-r) Gunther Scharnhorst, Helena Wong, Catherine Currier, Lauren Sautkulis, Cindy Anzalone, Jamie Lajoie. On screen: Jonathan Charron, Megan Caulder.

I reflected on the statewide shelter-in-place, and how many of us had to work from home. For those of us who are working parents, it was incredibly difficult to balance work life, home life and now, home-schooling life. It was difficult, but we managed. I don't know how working parents who were not allowed to work from home managed childcare. Challenges indeed for all of us! The mental load of dealing with trying to keep oneself and their family safe is not to be taken lightly. We all dealt with challenges during this pandemic. I, myself, do not know anyone personally who died from COVID-19, but I am sure many of us do. I had a good friend, another criminalist, pass away recently late last year. That rocked my world. It changed my perspective and solidified my view that 2020 was a horrible year.

Last year, we also bore witness to the increased calls of social justice for equality and cries for anti-discrimination against minorities, notably African Americans and Asian Americans. The weight of everything that has happened has been heavy for all of us. At the same time, I reflected that without going into the lab to perform casework during this past year, I would not feel as grounded as I do. It gave me something to focus on; it gave me an outlet. I had conversations with other adults, even though we were masked and socially distanced. I was not completely isolated. And I believe many of us had this bedrock of going into work that saved our sanity this past year.

Recovery

Now that people are becoming vaccinated and the number of COVID-19 cases are lower in the state, stores and restaurants are opening up again. We can safely gather with other vaccinated people unmasked in small numbers. Children are allowed to attend in-per-

son school, following COVID-19 protocols. Our lives are slowly getting back to "normal." The connections we crave with friends and family are slowly being nourished again. Getting back to normal, in fact, is making me reflect on this past year...making me even more grateful for my family, my friends, my job. I feel like I have a second lease on life, and I feel determined to do the best that I can in all things I try. It's like we are all peeking out from behind a slightly opened door to the outside, timidly lifting our faces to the sun, with big smiles on our faces. It's time to heal and recover from the effects of an isolated pandemic year. As I write this, the state just opened up completely yesterday on June 15. Although I am very happy, I am also cautious. I do plan to still wear a mask in public until my kids are vaccinated, but if I am around other vaccinated people, the mask comes off! It's time to start the recovery process.

Resilience

After experiencing the tragic losses from last year, we are moving forward. Some habits I've acquired as a result of the pandemic will continue, like hand washing for 20 seconds and washing hands more frequently. We keep lessons learned from the past, but we move forward. Why? Because we are resilient! This past crazy year did not break us. We are still here. With a new beginning, let's take this time to become better everything: better people, better criminalists, better wives or husbands, better parents, better friends. Let's collaborate, share ideas, and learn from each other. Let's continue to serve the people of our communities with a faithful heart, an inquisitive mind, and helping hands.

Stay safe everyone!

C. Currier

jonathan
Charron



CAC Editorial Secretary

**I am looking
forward to
ushering in a new
era of the CAC with
this conference.**

Summer is Here

California has opened back up and summer is here. Many of us have not had the opportunity to do much traveling, let alone get out of the house for a day trip within our wonderful state. With an abundance of stocked up vacation hours, a restored feeling of freedom with the lifting of travel restrictions, and a likely long overdue need for some rest and relaxation, what are your vacation plans for the summer? I have never been a person who has enjoyed the sun and sand that comes with a warm Southern California beach, but prefer the lush, green forest setting of the Sierra Nevada Mountains. This got me thinking about all the different types of vacations out there. Some, like me, have a schedule that is lightly peppered with tours, dinner plans, and events with plenty of time to be spontaneous. Other people need an agenda with every hour, event, and meal planned out, while still others prefer to have nothing but the location set in stone.

This variation of vacation styles led me to think about all the different things one can do with their precious vacation time. This thought reminded me of the time shortly after the arrest of the Golden State Killer, Joseph James DeAngelo. Our local news stations were reporting about the traffic jams caused by the hordes of true crime tourists flooding Citrus Heights to catch a glimpse of his house. Is true crime tourism a real thing? The answer is a resounding yes. And if you are ever seeking to burn some vacation hours with a somewhat work-related tour, California has a quite a few hot spots to check out!

Northern Tours

If you find your way up north, both Sacramento and San Francisco have some interesting tours you can take. One of the more popular topics I noticed was tours surrounding the Zodiac Killer. Having attended high school in the North Bay Area, I remember many nights driving around with friends speculating on which creepy looking house out in the country was probably used by the Zodiac Killer as a hideout. While this reality-based urban legend was very much a thing where I grew up, I know that we were likely far from the "Zodiac Shack" all the high school kids spoke about. I would certainly consider attending one of these tours if only to see how far-off our ventures around Lake Berryessa (a location where some victims of the Zodiac Killer were found) really were to the actual site of those homicides.

Southern Infamy

While the north can boast about tours surrounding one of the more infamous unsolved serial killers, the south has us beat by the sheer number of prolific killers they are able to base tours around. The magic surrounding Hollywood, movies, and fame draws people from around the world seeking their shot at stardom. With the picturesque Southern California coast as a backdrop, it is not a big surprise to me that the magic of Southern California drew in more than aspiring actors looking for their big break. The Grim Sleeper, the Night Stalker, Charles Manson, or the Hillside Strangler: Take your pick and I'm certain there is a tour available that features one or more of these infamous killers. With as much inspiration and material as there is near the glimmer of Hollywood, it makes sense that there are so many shows and movies on the topic!

A Central Conference

Perhaps a whole week of true crime is not the most ideal vacation you had in mind, but what if you could possibly get your lab to pay your way, be on the beautiful California coast, and not have to pick between Northern or Southern California? Well, you are in luck because the Fall 2021 CAC Conference has you covered! The Fall 2021 CAC Conference will be held on the Central California coast in beautiful Santa Cruz. While a tour of serial killers' houses isn't on the agenda to my knowledge, the week of October 18th through the 22nd will be filled with amazing workshops, engaging speakers, and for many, the first time attending a conference with other criminalists in person.

I hope that I will get to meet and reconnect with many of you in Santa Cruz. This has been a long and challenging year. Multiple conferences have had to be rescheduled, many training opportunities were not available, and lives, both in work and at home, have been disrupted in many different ways. We have also accomplished a lot over the last year. We have had our first virtual presidency (great job Jamie!), had the merging of northern and southern study groups via Zoom, and continued to provide training to our membership. I am looking forward to ushering in a new era of the CAC with this conference.

A handwritten signature in dark ink, appearing to read "Jonathan Charron".

An Interview with **Faye Springer**

We here at *CACNews* want to continue our efforts to highlight those members in our association that continue to rise to the top. One of the greatest honors the CAC bestows is the Life Member Award. This is awarded to those criminalists who have dedicated much of their professional life working in and around the world of forensic science and has maintained an exemplary record of service to the CAC. We have been lucky enough to see four of our members over the past two years become elevated to Life Members!

The two most recent recipients are Faye Springer and Fred Tulleners. I was able to speak with Faye about her journey with the CAC and about her incredible career. I also asked her a few questions about her late husband, Fred, who was elevated to Life Member at the same time as her.

JONATHAN CHARRON: Thank you very much for taking the time to talk with me, Faye, and congratulations on being elevated to a Life Member with the CAC! Tell me about how you first got into the field of forensics and where did you begin your forensics career?

FAYE SPRINGER: After getting a BS in biochemistry from UC Davis, I started applying for jobs that required a science degree of some type through the UC Placement Center. One of the jobs listed was for a lab tech position at the Santa Clara County Crime Lab. I applied, interviewed, and was hired in 1970. I worked at this laboratory for 2 years doing blood alcohol and toxicology work. After 2 years at Santa Clara, I applied for a criminalist position at the California Department of Justice. This was at the time when the state labs expanded from one center CII laboratory to 10 or more regional crime labs throughout the state. I was hired along with Fred Tulleners and one other criminalist to start the regional state crime lab in Riverside.

JC: You are currently working as a trace analyst for the Sacramento District Attorney's Crime Laboratory, but what other disciplines have you worked in?

FS: Blood alcohol, toxicology, dosage form drug analysis, biology (not DNA), firearms, and crime scene investigations.

JC: I feel like it is fair to say that you have performed work in almost all areas of forensics! I want to talk again about trace evidence. I feel while many disciplines are somewhat stable or expanding, trace evidence is an area that is experiencing a different path and becoming less common disciplines at many laboratories. What are your thoughts about the trend of trace programs going away in many laboratories? Why do you feel this is a trend that we are seeing and what are your thoughts on a good way to get more criminalists and laboratory systems engaged in the trace disciplines?

FS: Unfortunately, trace evidence is less and less utilized in criminal cases resulting in fewer and fewer analysts doing casework. The identification power of DNA has had the most dramatic impact on the need for a trace evidence examination. However, when DNA is not informative or doesn't answer the issue in a case, trace evidence may be able to provide an answer.

I think that there needs to be a better integration of trace evidence into the areas of biology and firearms. For instance, screening all hairs for species, similarities to person of interest, and methods of transfer can save unnecessary DNA analysis and unnecessary destruction of evidence. Trace evidence techniques are also suited for the identification of composition of firearms components, identification of gun powders and gunshot residue, and identification of bullet holes. If we do not make the investment in keeping instrumentation and methodologies current, cases that could have been solved with a trace evidence examination will no longer be analyzed. I think that laboratories in certain regions of the country need to relook at the centralized analysis of some types of trace evidence in order to provide this service to those laboratories that infrequently need a trace evidence examination. To have trace evidence examination disappear from forensic science would be a true tragedy.

JC: Before asking my next question, I wanted to offer my deepest condolences on the passing of your husband Fred Tulleners. I thought it was appropriate that you were both elevated to Life Members at the same time since you have



"This career can be extremely rewarding as long as you always do your best work no matter what type of case you are assigned."

both contributed so much to the forensic community and the CAC. What do you think Fred would have said about this appointment and what were some of his thoughts about the importance of the CAC as an organization?

FS: Both Fred and I were active members of the association and were honored to be elevated to Life Membership. Fred was a very strong advocate for sharing professional experiences and research in the forensic community. I know he felt that the CAC was the appropriate place to do this. We both felt that CAC is a leader among professional associations in dealing with issues confronting forensic science. CAC was the gold standard in making detailed ethics policies, establishing accreditation for analysts, and having quality seminars for papers, study groups, and a forum for the discussion of forensic issues. I know Fred was honored by his appointment to Life Member even though he died shortly thereafter.

JC: Having been a member for a long time, you have attended many of the CAC conferences. Of all the CAC conferences that you have attended, which was your favorite or most memorable?

FS: I think the seminar where I was given the Distinguished Member Award. I think that was in a seminar in Sacramento in 1997.

JC: Having been in forensics for a substantial time, you have been a witness to many changes within the field. What are some of your thoughts about the direction that forensic science is headed and do you feel that there are areas within the field that may need further change, or perhaps even a need to go back to different approaches?

FS: Over 50 years, there have been many, many advances certainly for the betterment of forensic science. Advances in DNA and digital evidence has resulted in solving of many cases. My main concern is that if we focus entirely on these areas, we lose our ability to handle or analyze other sorts of physical evidence. I am concerned that we will eventually accept sacrificing a few cases for the benefit of the majority.

JC: Diving into your diverse career, is there a case that you can think of that you worked that really challenged you? Or one that made a long-lasting impression on you causing you to still think about it today?

FS: There have been a lot of cases that were challenging. I was able to work on several serial homicide cases including the Trash Bag murders in southern California, the I-5 Murders in northern California, and the Bill Suff murder cases in southern California. These cases were solved in part due to the investigative information developed with trace evidence.

JC: Faye, thank you so much for your time with answering my questions. As a closing thought since you

have played the role of an educator in this field as well, are there any words of advice you can offer to college students looking to get into this field, or to young forensic scientists working in their first position in a laboratory?

FS: This career can be extremely rewarding as long as you always do your best work no matter what type of case you are assigned. It is always important to constantly review current literature, papers, and other sources of research to improve yourself and your field of interest.

JC: Thank you and congratulations once again on being elevated to a Life Member with the California Association of Criminalists!



Faye Springer looks at microscopic trace evidence recovered from the I-5 Strangler case in "Knot for Everyone," an episode of Forensic Files shown on Tru TV, Nov 02, 2008. (Original air date 2004)



(l-r) Greg Matheson, Faye Springer and Peter DeForest join in a panel discussion at the Spring 2010 meeting in Yosemite.

The Perseverance Award



An association is only as strong as its members. And the CAC has some incredible criminalists in its ranks. Twice a year, we have a set of awards that we bestow upon some of our members to show off and honor how incredible they are. This year, the Awards Committee along with the Board saw an opportunity to create another award honoring a truly remarkable person within our membership.

Before we describe what this award is, we want to acknowledge a special set of volunteers within the CAC. With all the constant changes going on during the last year, our organization would have truly fumbled without the skills, knowledge, and dedication of the webmasters. We wanted to extend a thank you to Bonnie Cheng, Regina Davidson, and our newest webmaster Mike Fish for all of the incredible work that you have done. Though their names are billed as the current webmasters, there was one other criminalist who continued to shape and support our online presence while having officially stepped down from the role. This criminalist is **Stephen Lu**, and he is our first recipient of the new **Perseverance Award**.

While the reasons that Stephen stepped out of his official role of webmaster are his to tell, we will say that he did not leave the association hanging while he needed to focus on other aspects of his life. Stephen showed dedication, commitment, and leadership even after stepping down, and without his skilled knowledge and coaching, our pandemic programming would have not been as successful as it was. The Board is proud to award Stephen with the first Perseverance Award, and we cannot thank him enough for all that he has done to ensure the CAC's continued success. You have our most heartfelt respect, admiration, and thanks, Steve.

Now with this award being added to our list of awards, we want to outline the requirements for this honor so that you may all think to nominate a fellow CAC member that fits the description.

“Stephen showed
dedication,
commitment, and
leadership even
after stepping
down”



Stephen Lu with the CAC Board of Directors. (l-r) Jamie Lajoie, Catherine Currier, Stephen Lu, Lauren Sautkulis, Helena Wong, Cindy Anzalone, Gunther Scharnhorst.

Summary

Being a criminalist comes with a number of different challenges. We use science to see through the eyes of victims during some of their most traumatic experiences and witness, through evidence, suspects committing unspeakable crimes. Peering into these darker aspects of humanity is challenging enough, but to do so while experiencing personal challenges is a feat that should be recognized.

Purpose

This award is designed to honor members who have shown strength, dedication, and perseverance in the face of challenging circumstances beyond their control, all while still actively contributing to the CAC. This award will be presented once a year, but there is no limit to the number of recipients. There is no limit to the number of times a person may be nominated for the award, nor to the number of times a person may receive this award.

Criteria

- The candidate must be a member of the CAC in any category.
- The candidate must currently be contributing significantly to the association in one of more of the following areas:
 - Serving on the Board of Directors
 - Serving on a committee
 - Actively working on the planning and execution of a conference or study group meeting
- The candidate must be experiencing a challenging personal circumstance. Examples of a personal circumstance may include but are not limited to:
 - Personal health issue or complication
 - Loss of home due to a natural disaster
 - Unexpected loss of an immediate family member

Nominator

Any CAC member; self-nominations will not be accepted

Nominating Period

The nomination period is open any time, but nominations should be submitted within one year of the resolution of the nominee's circumstance.

Please stay tuned as we have one more award in the works to honor our dedicated membership named after a true trailblazer in the field of forensics and in California. In the meantime, please remember that nominations are always being accepted for many of the awards while some nomination periods are open for six month stretches. For a list of all of the prestigious awards the CAC bestows to our membership, visit https://www.cacnews.org/awards/awards_dates.shtml.



Criminalist Stephen Lu accepts the CAC's first Perseverance Award from Immediate Past President Jamie Lajoie and President Catherine Currier.



"The Board is proud to award Stephen with the first Perseverance Award, and we cannot thank him enough for all that he has done to ensure the CAC's continued success."





New on YouTube:
CAC's own Wayne Moorehead tackles "Myths and Misconceptions About Microscopy" in this informative video presentation.

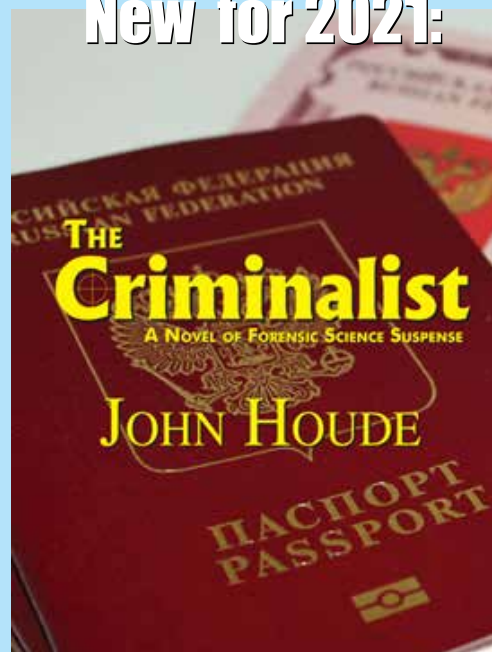
Ten myths or misconceptions about microscopy are presented with examples explaining the reality that breaks the myth or the correction that clarifies the misconception about microscopy in video and PowerPoint presentation format.

Ever wonder: Why you get eye fatigue while using a microscope? Why textbook images show good resolution but you have not seen the same thing in the microscopes you use? How to use both eyes to see the

sample clearly through the oculars? How to quickly find your sample on the microscope slide? If there is a relationship between what you see and the composition or structure of what you observe through the microscope?

In order to have a basic understanding of microscopes, essential parts are named of two commonly used microscopes: a stereo microscope (aka dissecting microscope) and a transmitted light biological microscope. I'll show how to adjust your oculars as well as focus each one for each eye, and demonstrate the importance of proper illumination and a short version of how to establish Kohler illumination to obtain the best contrast and resolution for a sample. Lastly, examples are given showing optical properties (morphology, refractive indices, birefringence, optic sign, etc.) are the direct result of the composition and structure of the object or particle being examined.

New for 2021:



The Criminalist

Narrated by

Two-time Emmy® nominee

Kathleen Gati



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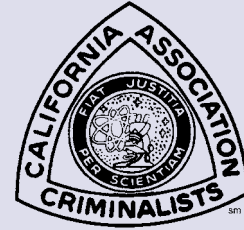


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CATCHING THE NEXT WAVE of FORENSIC SCIENCE



October 17-23



Fall 2021 CAC Seminar
Hilton Santa Cruz / Scotts Valley

Hosted by:

CA BFS Jan Bashinski DNA Lab
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