

The

CACNews

News of the California Association of Criminalists • July 2023



The President's Desk

**Meiling
Robinson**



CAC President

*“The time spent in
your company and
the memories we’ve
made at each seminar,
is what I will always
carry with me.”*

The Many Joys and Challenges of Working in Forensic Science

As my time serving as your President is fast approaching an end, let me count the ways in which service to this organization and this field has brought me joy. Being a CAC member has been extremely rewarding and serves not only a professional outlet for growth and development but also provides a forum to be among others like you, bonded by common scientific interests and devoted to the advancement of the profession. But more than that, without question, the benefit of lifelong friendships. I am thankful for the people that I have the pleasure of knowing— the brilliant, offbeat, extraordinary people which make up this organization. The time spent in your company and the memories we’ve made at each seminar, is what I will always carry with me.



Above: CAC President Meiling Robinson (second from left) with former Presidents Adam Dutra, Catherine Currier, Jamie LaJoie, Alice Hilker, Gregory Laskowski and President-Elect Sheltri Gresham (center).

This profession has also afforded me the ability to be wealthy in service of others. It’s sometimes easy to forget this connection. Many “nine to five” jobs can feel like something you simply do to get paid, and oftentimes it can feel like “success” is a personal journey that relies on your own achievements and individual brilliance. And, in our detail focused field, it’s even easier to get a tunnel visioned mindset. To filter by seeing things solely in terms of what we can or cannot control. Control and organize the chaos of the crime scene, control the laboratory environment, control the workflow to maximize throughput, but cannot control the amount of requests, the unusual or rushed demands from detectives or attorneys, or decisions or actions made by others which may positively (or negatively) impact your work. I think this is also, perhaps, to some extent, a function of the gravity of our work where quality of work holds significant weight and impact.

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On the cover:

Reno, Nevada: The Biggest Little City in the World was home to the CAC 2023 Seminar. Guests stayed at the Whitney Peak Hotel, located next to this landmark sign.

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The deadlines for submissions are: December 1, March 1, June 1 and September 1.

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The President's Desk

I often find myself needing to reflect on this quote by Mahatma Gandhi, "the best way to find yourself is to lose yourself in the service of others." Like an exercise in mindfulness, I have to remind myself often of this, like a mantra, over and over, when I find myself feeling lost or overwhelmed by the challenges of the workplace.

*"...focusing on how you
can help others serves as
the perfect anchor and
guide to help you succeed
in your work."*



I have also learned that personal growth and real success are largely centered on one's impact on others. Putting service at the center of my work reminds me of this. Whether it's service to the community, service to CAC members, service to our clients, service to our superiors, colleagues or staff—focusing on how you can help others serves as the perfect anchor and guide to help you succeed in your work. Service not only positively impacts those you serve, but in my experience it often provides benefits. Service, whether in my work or as a CAC member, makes me feel useful, fulfilled, and opens new possibilities for personal growth, and provides opportunities to learn valuable lessons in gratitude and empathy.

I recently had the pleasure of speaking to an auditorium full of young women grades 6th-12th about what we do as forensic scientists. Specifically, at the Girls Academic Leadership Academy (GALA) which is the only all-girls public STEM school in California. This was my second time participating, but my first time in-person. It was both delightful and humbling to share my experiences with these remarkably bright young women. This experience is always an exercise in practicing gratitude. It is both rejuvenating and rewarding to know that our discipline and somehow my journey instills some excitement and fascinates future scientists.



GIRLS ACADEMIC LEADERSHIP ACADEMY
Young Women's Career Conference



Above: Robinson (top right) featured on the Girls Academic Leadership Academy twitter account [@GALAcademy](https://twitter.com/GALAcademy).

Participating in this Young Women's Career Conference was a highlight of the quarter and a good reminder of what it was like back at the start. Everyone's journey to this career is different. For some it's a calling and others find themselves finding it along the way or falling into it. Whatever the circumstances, motivations and reasons, we've ended up here in this career which applies scientific methods to analyze evidence left in the aftermath of crime scenes.



Above: Robinson takes a photo with friends, enjoying the time spent together at the 2023 Seminar.

In addition to the joy one feels in service to community, I strongly believe this type of community outreach is necessary and vital to the furtherance of forensic science. It may not often feel like it makes a difference, but it matters. It matters because it holds the potential to bring the right people to our sphere of influence. It matters because we have an obligation and duty to pay it forward, to hope to teach, learn and

The President's Desk

grow in the process of sharing with others the things learned through hard earned trials and tribulations. It is also a fundamental core tenet of our partnership with universities, law enforcement programs and criminal justice system, and purpose for our Endowment.

Being a CAC member and working in forensics (to some extent) also means that I get to enjoy the benefits of lifelong learning. I have always been passionate about lifelong learning. From a young age I have always enjoyed any opportunity to learn new things. CAC membership opens up additional opportunities to attend study groups and workshops in other disciplines than perhaps your area of assignment. The general session of the annual seminars are a comprehensive



Above: Robinson examines a privately made firearm exemplar from a general session presentation.

mix of presentations from all facets of criminalistics. Providing lifelong learning opportunities is a core intention of CAC and while mostly for the purpose of imparting technical knowledge, it also serves as a means to learn more about yourself and discover new passions. Lifelong learning also improves your overall brain fitness by teaching you to better adapt to new challenges and may result in a boost in confidence. Simply by learning new skills, which may or may not have anything to do with your current work, expands your perspective and teaches you how to problem solve in new and different ways. Academic knowledge in a subject is only one part of the total benefit from new learning opportunities. One of the main positives of challenging yourself to try new things is practicing creative thinking and the acceptance that “upskilling” does not have to be productive to be valuable.

Just as you can't have a rainbow without rain, you can't have joys in forensic science without the woes. While everyone's experience in this career is unique, there has been recent research in the areas of health and wellness among forensic scientists which indicate that stress, specifically secondary traumatic stress and burnout are areas of general concern impacting working professionals. In the peak of the COVID pandemic we started to see more and more interest in having this discussion regarding these difficult topics, obviously felt by many, but perhaps, difficult to recognize or understand, hardly noticed or acknowledged, and maybe also too busy to really address. As scientists perhaps we're less equipped or purposefully distanced from the emotional side of this work.

*“...greater employee belief
that their organizations
were addressing these issues
predicted lower levels of
secondary traumatic stress
and burnout and higher levels
of compassion satisfaction.”*

As an organization we have had this discussion before, in previous CACNews articles and in presentations during the similarly themed 2022 seminar. I won't go into a full review of recent articles on the subject of secondary traumatic stress and burnout, but I (and other colleagues) find it interesting and of value, especially in the context of other topical subjects of job satisfaction and employee attrition among forensic scientists.

A key finding in research published in the Journal of Forensic Sciences by Andrew P. Levin, M.D., et. al.¹, found that there was a “strong relationship between forensic scientists' perceptions of their organization's efforts to address stress and promote well-being, and their levels of secondary traumatic stress, burnout, and compassion satisfaction.” Furthermore, analysis of the surveys indicated that “greater employee belief that their organizations were addressing these issues predicted lower levels of secondary traumatic stress and burnout and higher levels of compassion satisfaction (Levin et. al., 2021).”

¹Levin, A. P., Putney, H., Crimmins, D., & McGrath, J. G. (2021). Secondary traumatic stress, burnout, compassion satisfaction, and perceived organizational trauma readiness in Forensic Science Professionals. Journal of Forensic Sciences, 66(5), 1758–1769. <https://doi.org/10.1111/1556-4029.14747>

The President's Desk



Above: President Robinson and President-Elect Gresham with the CAC Presidential Coconut. Photo by Michelle Bell.

The research by Levin et. al. also recognized strategies to improve overall employee wellness and health, which included not only individual strategies such as mindfulness, relaxation and reflection, but included organization accountability and implementation of additional strategies which are vital interventions to address stress and trauma. These strategies include flexible scheduling, improved communication with supervisors, and education to assist employees in recognizing and mitigating stress (Levin et. al., 2021).

Other research aimed at identifying factors which determine job satisfaction and dissatisfaction among forensic scientists. The factors contributing to the highest level of job dissatisfaction were “the way the company policies are put into practice” and the “chances for promotional advancement.” Significantly, this study stated, “the result is a lack of transparency which creates distrust.” And that leaders “should consider organization development (OD) strategies to improve communicating how and why policies are implemented and develop a talent management program offering job advancement to increase the levels of job satisfaction among scientists (Ballaro and Meade², 2021).”

Generally, I believe we’re still attempting to have this conversation. This, too, is just another example of how sharing our experiences with each other matters– to learn to understand the factors that impact our profession.

*“Nothing is perfect,
but as the film director
Aaron Rose once said,
‘in the right light, at the
right time, everything is
extraordinary.’”*

Speak the things that matter to us. To celebrate the things about our field which bring us joy and to recognize those things that challenge us to improve. There is always a balance to which we work towards. Nothing is perfect, but as the film director Aaron Rose once said, “in the right light, at the right time, everything is extraordinary.”

Below: Robinson gives her final presidential address at the 2023 Seminar.



As I prepare to transition to my new role as Immediate Past President, and move on to seminar planning as a part of the 2024 host laboratory, I want to close this President’s Desk by expressing my gratitude to you for the encouragement and support and for giving me the honor and pleasure of serving as your President.

Gratefully yours,

Mei

²Ballaro, J., & Meade, R. K. (2021). Factors determining job satisfaction and dissatisfaction for forensic scientists. *Organization Development Journal*, 39(2), 37-51.

Jonathan Charron



CAC Editorial Secretary

“Just like in our personal lives, change in the world of forensics can come in many different packages.”

The Commitments We Make

Welcome to the first issue of 2023! While we here at CACNews have previously published every quarter, this issue has found itself towards the middle of the year to no one's fault but mine. So, I will start this editorial with an apology before I get to anything else. I am sorry that I have not been consistent with publishing, and I am making changes to ensure the publication frequency of the CACNews is timely, consistent, and reliable once again. I have missed sharing my thoughts about the world of forensics with you these past 6 months. In fact, the cause of this delayed publication is loosely the topic of this article as I think many of you might be able to understand my own struggle with change, over-committing, and self-preservation.

Change is one of those things that comes easy to some, difficult yet achievable for others, and even impossible for a third group. Just like in our personal lives, change in the world of forensics can come in many different packages. As technology advances, it is our obligation to face that change with open minds and arms. We owe it to our field, and especially the systems we serve, to constantly be challenging our current methods and techniques as new advances emerge. Yet, changes in technology are not the only thing we, as criminalists, need to keep in mind. The society we serve is also changing. Our societal norms, acceptable work conditions, and ways in which we work and communicate have changed. During the start of this year, I explored these types of changes in various laboratory systems through interviews with criminalists across the state. My task was initially to gather ideas of what a bench-level criminalist viewed as things they perceived as needing to change or improve, and what were some great selling points that aided in staff retention and satisfaction.

What Are We Worth?

One resounding and consistent response was that pay and benefits needed some improvement. The various systems I looked at had inconsistent benefits and an even wider range of pay. While I understand the concept of some cities being more expensive to live in than others, I heard many stories of new criminalists having to maintain an extra job to make ends meet. Using a quick search from Indeed.com, I looked up the average salary of a California scientist. Many of the entry level salaries started above \$90,000 and most topped out much higher than 150k. According to our most recent salary survey, some of the salary for criminalists barely start above 50k. The stark difference in starting pay for criminalists compared to other scientists throughout California should be something brought up in every salary and contract negotiation. Criminalists are not just scientists. We must understand complex scientific processes, be able to navigate the complex world of the legal system and be well-versed in translating these complexities to a panel of jurors. We are public speakers, instructors, scene investigators, and the cost of a mistake in our line of work can potentially exonerate an innocent person or help find justice for victims of horrible crimes. What sort of price should we assign to this? Better than 50k a year.

Striving for Balance

Another common theme I heard during these interviews dealt with the benefit of flexibility to work from home or having an alternative work schedule. Many spoke of the perceived value they gained in having less commute time and slightly longer hours over fewer days. With many lab systems introducing these flexibilities originally as an adjustment for COVID protocols, the barrier of this being impossible is now gone. The work schedule variation has absolutely allowed more people to achieve a better work-life balance which

leads to better mental health and wellness. This change, while seemingly stable for many labs at this time, is something that should be fought for every time it comes up as a topic of being taken away.

The Culture of Work

A final theme I heard repeated many times was the concept of a positive work culture. Many of the people I spoke with acknowledged that their organization had small things in place to help develop a positive work environment and that the culture at their office was a large reason they stuck around. The types of culture boosters included things like gym access and time, a wellness committee for the laboratory staff, quarterly planned group activities, and monthly birthday celebrations. My own office recently reinvigorated their commitment to the creation and support of employee wellness. Since that commitment, our DA took the time to come to the lab and speak with us in person about our needs and wants. That meeting catalyzed a significant shift in positive work environments as it showed the commitment from the top of the system. Since that meeting, we have had food trucks come to our location, yoga session offerings, wellness and peer support groups started, and perhaps the simplest but highly appreciated perk of having an updated vending system with healthier food options. The meeting was the start, but the follow-through in those commitments to us has really helped change the culture. I could go on about this topic for a while, but in an upcoming article Stephen Lu brilliantly discusses this topic at length.

A Commitment to Ourselves

"...if we do not commit to keeping ourselves mentally, physically, and emotionally healthy and happy, we run the risk of letting the awful things we deal with in our jobs sneak into our minds more than is advisable. "

With that discussion about how change to lab cultures can potentially hurt or help wellbeing and workplace culture, I would be remiss in not talking about the various commitments we have as criminalists. Aside from our day-to-day casework, we must make commitments to many different tasks and people. However, one of most important commitments we make should always be to yourself. I think that

if we do not commit to keeping ourselves mentally, physically, and emotionally healthy and happy, we run the risk of letting the awful things we deal with in our jobs sneak into our minds more than is advisable. This commitment to ourselves can be the first thing that we break since we are only accountable to oneself when we fail. But without self-care, we are not well-equipped to maintain commitments to other tasks and the people around us. Take that extra day off to binge watch the new season of your favorite crime drama. Buy the tickets to that tropical paradise you've been holding off on. Stay up a little later with your friends or family to finish that amazing discussion about the future. Make the commitment to care for yourself in any way you need to. Give yourself permission to be selfish from time-to-time and always commit to be good to "you".

Finding Your Place in the CAC Community

"By lifting each other up and supporting one another, our organization will remain strong, resilient, and foster amazing relationships as we share knowledge. "

With "you" being taken care of, you are free to start to focus on the other commitments you may be approached with. One of those commitments I am asking you to consider is the commitment we should all try and make to the CAC as an organization and to other criminalists out there. Regardless of what skills you enjoy, think of ways that you can employ those to better our forensic community. Are you someone who loves making new people feel welcome in a room of strangers? Put your hat in the ring for being part of our New Member's Committee. Do you have an interesting case that you've worked on? Reach out to the upcoming seminar chairs about presenting at our 2024 seminar or draft a paper for publication in the CACNews! If we all strive to answer, "How can I help this community and our association?" we will all be able to lighten the load that these commitments can weigh on us! If you are looking at where to begin, I am listing all our open committee positions at the end of this editorial. By sharing the load, we can all avoid over-committing and have the support we need to achieve greatness. By lifting each other up and supporting one another, our organization will remain strong, resilient, and foster amazing relationships as we share knowledge.

*“...this article is also
a first step in my own
pursuit for a better work-
life balance, engaging in
self-care, and reducing my
commitments.”*

Having written this article, I feel like a bit of a hypocrite since I am often guilty of sacrificing self-care and not ensuring I am taking care of “me” for various reasons. For me, this article is also a first step in my own pursuit for a better work-life balance, engaging in self-care, and reducing my commitments. As part of this commitment to myself, I have made the decision that I will not be running for the Editorial Secretary position for another term after completing this term. I’ll get sentimental as my last editorial gets closer, but I wanted to begin the work of getting someone trained and ready to take over for a seamless transition. Please [email me](#) if you are interested in this challenging, fulfilling, and wildly rewarding role in the CAC.

My Request to You

As I close this editorial, I want you all to reflect on a couple of things. The first is your own personal well-being. Take the time you need for yourself and know that it is ok to not be ok sometimes. We deal with some traumatic subject matter that can cause some pretty horrible health issues, both physical and emotional. If you are in an office that does not have a great support system, start a movement for change! Be that catalyst for a positive culture shift! I also want you to reflect on the value that we as criminalists add to the world. The support we provide to the criminal justice system aids in victims being able to move forward by providing an unbiased, scientific voice in trials. Be vocal with your various unions during negotiations and impress upon the powers that be that we are worth more than below the average salary of a scientist. Use the salary survey we publish every year and if you are tasked with updating the information for your laboratory, really take the time to fill it out as completely as possible! My last reflection request is to think on how you can continue to contribute to our association. We have so many open committee seats and opportunities that are waiting to be filled by an eager criminalist! This is especially true if you are new to the association. Joining and serving on committees is a great way to begin the journey to shape the future of our amazing group and to help ensure that we continue to thrive. You are an amazing group of humans and I am proud to be numbered in your ranks.



OPEN COMMITTEE POSITIONS

ABC Certification Committee, At-large Appointee

By-laws Committee

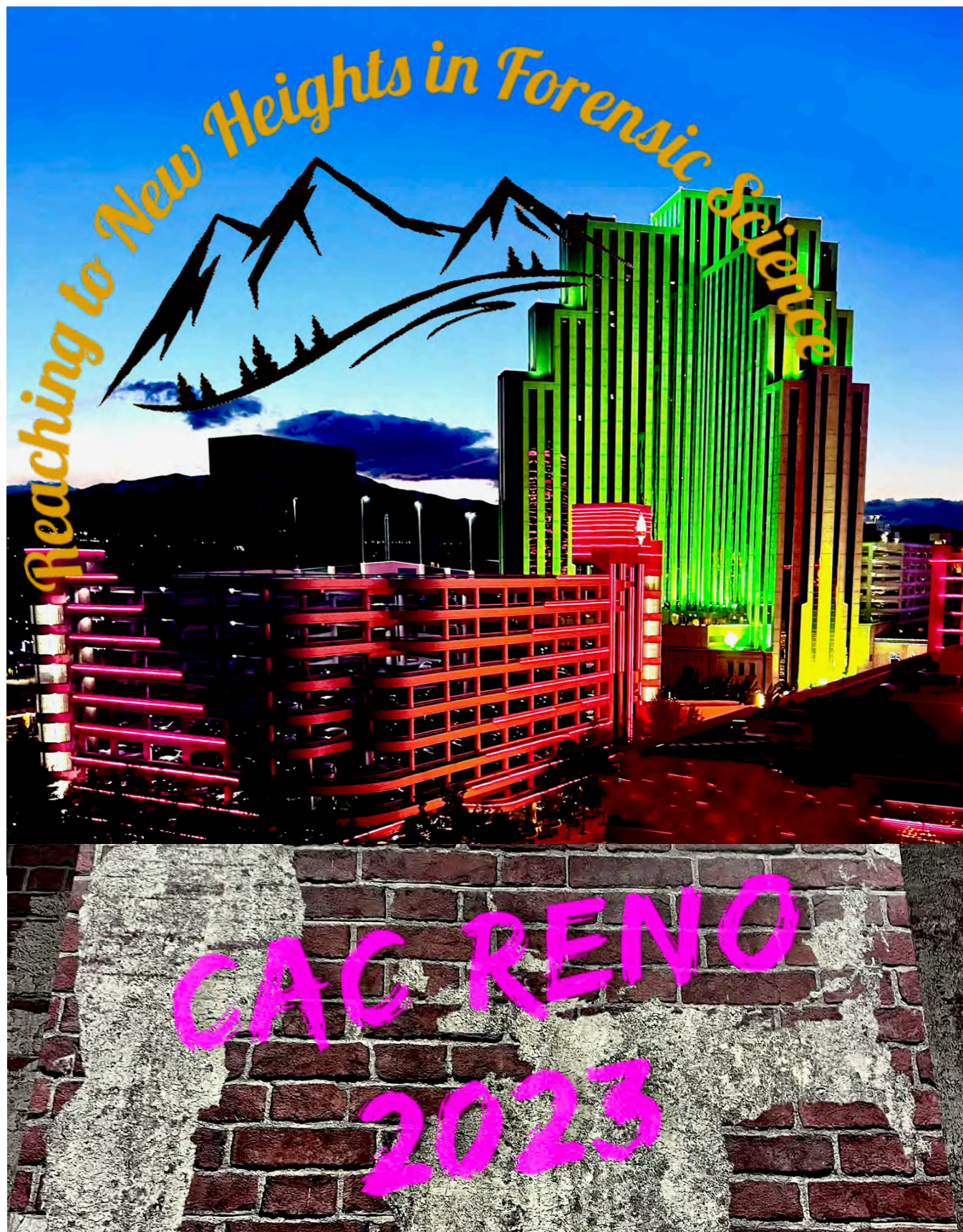
Founder’s Lecture Committee

New Member Committee

Training & Resources Committee

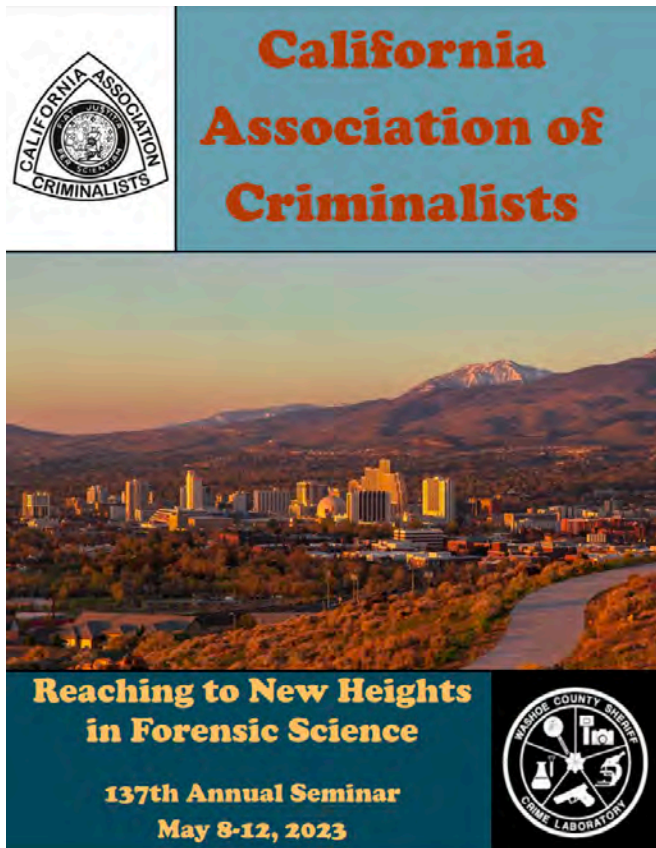
If you are interested in any of these committees, please email our current President Sheltri Gresham at president@cacnews.org and let her know you are interested!

Thank You for Joining Us at the 2023 Seminar!

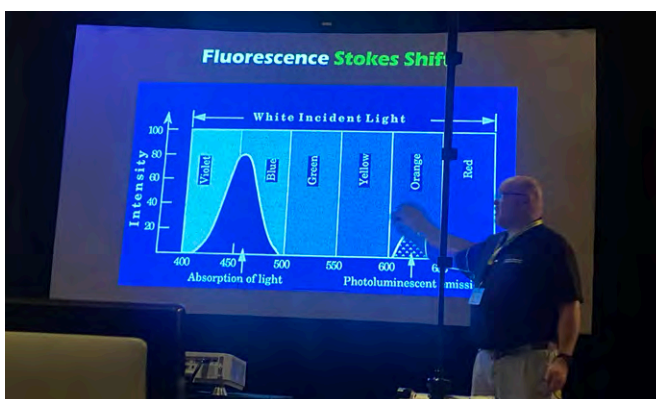


Above: Michelle Bell captures the setting and theme of this year's seminar: Reaching to New Heights in Forensic Science in Reno, Nevada.

The CAC 2023 Seminar



Below: Workshop instructors Helena Wong of Oakland PD and Jason Cole of Foster + Freeman share their expertise in DNA workflow efficiency and alternate light source technology, respectively.



Workshop Highlights



Above: Attendees of Foster + Freeman's "Detecting More Evidence: Extend Your Search Beyond the Visible" workshop utilize the latest technology to examine biological fluids, gunshot residue, and fingerprints on difficult backgrounds.

General Session Highlights



Above: Miguel Macias of the California DOJ Sacramento Laboratory presents "DNA Loss as a Result of Concentration Via Evaporation"



Above: Jonathan Charron of the Sacramento County District Attorney's Crime Laboratory presents "A 22LR Revolver Double Strike: The Case of an Unusual Toolmark"



Above: Keynote Speaker Assistant District Attorney Zach Young presents "Downtown and Neighborhood Shootings: The Murder of Paul Dobbins"



Below: Brittney Chilton and Darby Stienmetz of the Washoe County Sheriff's Office present "Connecting With the Community in a Changing Social Media Climate"

General Session Highlights



Above: CAC Life Member Faye Springer, retired criminalist of the Sacramento County District Attorney's Crime Laboratory with over 50 years of experience in criminalistics, delivers the 2023 Founder's Lecture: "And the Question Is?"



Above and below: Special Agent Brian Parker from the Bureau of Alcohol, Tobacco, Firearms and Explosives presents "PMF Overview with Prop Firearms and Colusa Homicide Case Study." Seminar guests had the opportunity to examine different parts of privately made firearms, commonly known as "ghost guns."



Above: CAC Life Member Gregory Laskowski of Criminalistics Services International, LLC presents "Out on a Limb: A Unique Toolmark Case"



Above: California DOJ and Santa Cruz County Sheriff's Office present "The Power of Partnerships: Joette Smith Cold Case Homicide, 1983"

Thank You 2023 Vendors!



- Agilent
- CTS
- CML, Inc.
- Foster + Freeman
- Hamilton
- JusticeTrax
- Leeds
- Oak Analytics
- Promega
- QIAGEN
- Thermo Fisher
- Waters



Thank You 2023 Vendors!





Social Highlights



Above: Seminar guests enjoy this year's Hospitality Suite, sponsored by Hamilton and Thermo Fisher.



Below: Enjoying Reno - after hours karaoke fun at Club Cal Neva.



Wine & Cheese



Poster Session and New Member Reception



Poster Session and New Member Reception



A warm welcome to our new members!



Poster Session and New Member Reception





Poster Session and New Member Reception





A Banquet Evening in the Biggest Little City in the World



The 2023 CAC Banquet was spectacularly set at the Whitney Peak Hotel Ballroom in Reno, Nevada by the Washoe County Sheriff's Office Forensic Science Division. Guests gathered for a night of delicious food and delightful fun & games, sponsored by Thermo Fisher and RAGECON Reno Area Gaming Expo.



Awarding Our Members



Below: Lisa Smyth-Roam receives the Service Award as Chair of the 2023 CAC Seminar.



Above: Stephen Gresko and Laura Dickson receive the Service Award as Co-Chairs of the 2023 CAC Seminar.

Welcoming Our New President



Above: The CAC Presidential Coconut passes from President Meiling Robinson to President-Elect Sheltri Gresham. Robinson transfers the presidency to Gresham with the new CAC tradition of sabrage.

Below: President Sheltri Gresham delivers her first speech to the banquet guests and joins the family of CAC's honored presidents.



THANK YOU! 🙌

2023-2024 Board of Directors



Above: The CAC Board of Directors. Front row: Sheltri Gresham, Meiling Robinson, Jonathan Charron, Megan Caulder. Back row: Lauren Sautkulis, Günther Scharnhorst, Helena Wong. Not pictured: Darlene Espejo, Stephanie James.

Seminar Committee



Above: The 2023 CAC Seminar Committee: Stephen Gresko, Laura Dickson, Anastasia Melendy, Lisa Smyth-Roam.

Publications Committee



Above: The CAC Publications Committee: Janna Cieslak, Jonathan Charron, Kathe Canlas.

GAME ON!

Below: RAGECON staff provided a delightful evening of entertainment. Seminar guests learned how to play a wide selection of tabletop games.





**THANK
YOU ALL
FOR
JOINING
US!**



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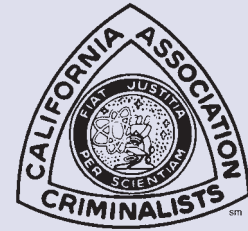


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