


The CACNews

News of the California Association of Criminalists • Fourth Quarter 2022



O	C	L	A	B
Has been a juror	Has gotten in an accident in a county car	Has been in more than one section	Has talked on the phone with suspects	Has worked a scene on Christmas Day
Has received a work-related award	Has participated in Baker 2 Vegas	Has never testified	Has picked maggots out of decomposed tissue	Has been in a helicopter for work
Has worked at another forensics laboratory	Has gotten their work published		Has appeared in the media for a case	Has visited at least 5 police departments in the county
Has a family member in law enforcement	Has gotten locked in the stairwell	Has Worked the largest mass shooting in OC	Has traveled overseas for work	Has testified in a jail
Has trained in TLC	Has testified before the grand jury	Has audited another lab	Has forgotten their keycard	Has held three different job classifications at OCCL

The President's Desk

Meiling Robinson



CAC President

"...this holiday season I am committing to practicing gratitude, to anchoring myself in the present, and appreciating the little things."

The Liminal Space and an Exercise in Practicing Gratitude

The holidays have descended upon us and once again it's time to take stock of the year, reflect, and express gratitude.

This time of year it's easy to get spooled up and operate in hyper drive, but I'm hoping to and striving to slow down. Since my mind is so easily pulled towards busyness, this holiday season I am committing to practicing gratitude, to anchoring myself in the present, and appreciating the little things.

As I compose this over the Thanksgiving holiday it is befitting that I articulate the things that I feel grateful for. When I think about all the things that I have to be grateful for there are many things I can enumerate. Of course the common things—the love and support of my family and friends, the roof above my head, the solace found in hygge or the quality of coziness and comfortable conviviality—these comprehensive things are what many would universally accept are things to be thankful for.



The Danish concept of hygge: "Pronounced 'hoo-guh,' the word is said to have no direct translation in English, though 'cozy' comes close. It derives from a sixteenth-century Norwegian term, hugga, meaning 'to comfort' or 'to console,' which is related to the English word 'hug.'" - Anna Altman, The New Yorker

But the things that I am probably the most thankful for are the small moments of joy—the smiles, the laughter, the gentle touches and embraces in the moments before the moments. You know, those moments—the time just before the big moments, like the time you met your best friend, that cup of coffee with your parents on the morning of your wedding day, or the gentle embraces before you had to let go and give a loved one or beloved pet back to the astral plain.

I have always had a fascination with these moments, this concept of the in-between, and the aesthetic of the transitional space. Long before I became aware that there was a term for this space I felt the power of these moments.

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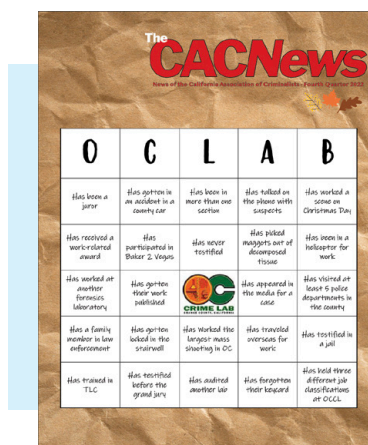
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On the cover:
In honor of National Forensic Science Week, The Orange County Crime Lab played a week-long bingo game using this custom bingo card, where staff had to find fellow colleagues who fulfilled the squares. See more on page 15.

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

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INSIDE

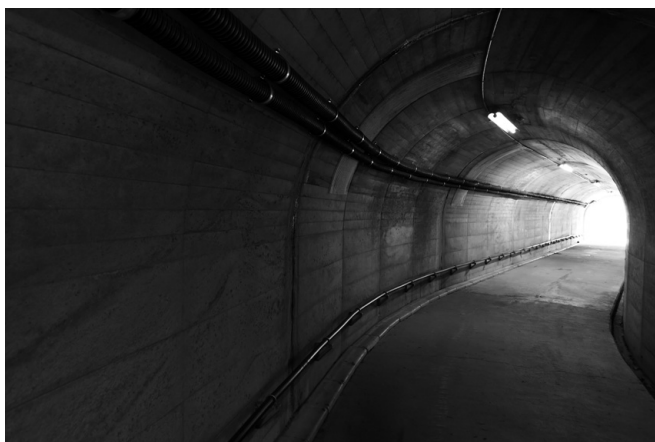
The President's Desk: "The Liminal Space and an Exercise in Practicing Gratitude"	
Meiling Robinson.....	2
The Editor's Desk: "End of Year News"	
Jonathan Charron.....	5
Criminalist Samantha Houle Receives the Edward F. Rhodes Memorial Award	
Samantha Houle.....	6
Remembering George Sensabaugh	8
Education in Forensics: An Interview with Dr. Ashley Hall, Director of the UC Davis Forensic Science Graduate Program	
Jonathan Charron.....	11
National Forensic Science Week Highlights	15

The President's Desk

"The magic of these moments and spaces evoke a unique feeling, an eerie comfort and a strange solace with being on the threshold of monumental change."

This liminal space—whether a physical, tangible space or the more commonly experienced less tangible emotional, metaphorical psychological liminal space, has always resonated with me. The magic of these moments and spaces evoke a unique feeling, an eerie comfort and a strange solace with being on the threshold of monumental change.

This concept of psychological liminal spaces, which accompany life's transitions or milestones, is what we experience as those moments before the moment. When in these liminal spaces, usually wrought with anxiety and uncertainty, I strive to anchor myself by being present and practicing daily gratitude.



Liminal space: Liminal is an English adjective meaning "on the threshold", from Latin *limen*, plural *limina* (Wikipedia). Liminal spaces can represent transitional physical spaces such as the tunnel pictured above, or non-physical moments in time.

On particularly difficult days, when gratitude is difficult to find, I have to remind myself to savor the good. Life moves so fast and these moments can just brush past without us noticing. I have to make a concerted effort to slow down, tune into my senses, and focus on what I can see, hear, touch, smell, and taste.

As I look around my dining room table I am thankful for the smiling faces of my kith and kin. I can see and feel the warmth of their love radiating from within them. I am grateful for the hugs and hands touching hands. Thankful for the smell of fall spices and hickory smoke emanating throughout the house. Grateful for the melodic trill of their laughter, which fills this space, my space. I join in.



Kith and kin: Kith comes from a word of Germanic origin meaning "known". Kin is also of Germanic origin, from an Indo-European root meaning "give birth to". Your kith are your friends or acquaintances, while your kin are all the people you are related to. (Macmillan Dictionary)

I am also grateful for this newsletter. If not for the CACNews I don't think I would have felt this concept so concretely. I am thankful to the membership for giving me this forum to openly explore and embrace my complete, authentic self. As the end of the year fast approaches, I am also reminded that it's time again to [renew CAC membership](#). As President, I would be remiss in my duties if I didn't properly steward you and remind you about everything you'd be missing if you left CAC. I think the best way to accomplish this is by taking this opportunity to not only renew our membership, but also to practice gratitude—we affirm the good things we've received and we acknowledge the role other people play in providing our lives with goodness. I am thankful for the many good things I have received from CAC. Specifically, the deep connections I have made which enrich my personal and professional life. What motivates me to renew and what I appreciate the most is that I can tangibly see and feel that we, the members of CAC, are committed to each other's growth and well-being. I am abundantly grateful for this organization, which is beautifully diverse and inclusive. I am thankful that together we can continue to grow.

I wish you all the hygge, solace and respite of the holiday season found within the moments before the moment.

Mei

Jonathan Charron



CAC Editorial Secretary

*"I am optimistic
that 2023 will bring
some amazing
experiences for the
CAC."*

End of Year News

As another year ends, I am finding time is slipping by a whole lot faster than it normally does (evidenced by how late this publication is reaching you! I apologize wholeheartedly for this delay!) The typical end of year deadlines have started to pile up, the turkey comas have worn off from Thanksgiving, and the race to the holiday season and year end has begun!

I am optimistic that 2023 will bring some amazing experiences for the CAC. The Regional Directors are hard at work ensuring you have many opportunities to continue your education through study group meetings. Last year, 137 members attended various study group meetings in a variety of different disciplines. Stephanie James and Lauren Sautkulis are working to get a set of meetings scheduled for January, so keep checking back at the CAC website for updates!

Another CAC event to look forward to is the 137th CAC Training Seminar hosted by the Washoe County Sheriff's Office. This event will take place from May 8th to May 12th at the beautiful Whitney Peak Hotel in downtown Reno, Nevada. The CAC website currently has the links for the hotel room rates up now and will soon be updating some of the specific seminar registration information. Being from Reno myself, I might be a little biased when I say that this is an incredible city. There are so many things to do in and around "The Biggest Little City in the World". If not having seen everyone for a year since the seminar isn't enough for you to attend, this location is truly one of a kind and has something to offer everyone! I look forward to seeing you there!

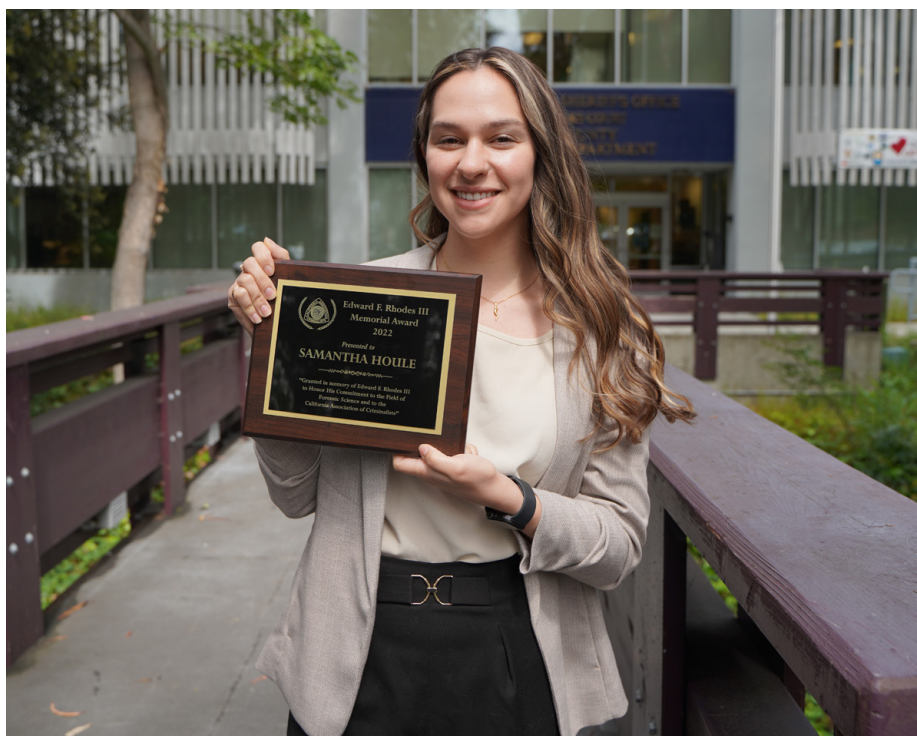
To finish with my end of year news, I want to remind you all that we offer a series of different awards to honor and recognize this incredible membership. Many have open submission timeframes, but there are a couple awards that have deadlines of December 31st. There are awards ranging from honoring those just starting their careers in forensics, to those seeking financial aid for certification exams, to awards that honor the titans of our industry who have influenced the world of forensics over many decades. While the honor of being a recipient is fantastic, there are often other perks related to these awards!

Our latest recipient of the Edward F. Rhodes Memorial Award is Samantha Houle from the Alameda County Sheriff's Office. The Ed Rhodes award is intended for newly employed criminalists (less than 3 years of experience) or those seeking to enter the criminalistics field. This honor includes a \$1000 stipend to attend a relevant forensic conference or seminar to expand their training and education. I urge you all to take a moment and go to [CACNews.org](https://www.cacnews.org) and check out the Awards tab to see if you or someone you work with is eligible and deserving one of these honors!

To further nudge you into nominating someone for an award, I want to close my editorial with sharing the experience Samantha had as the Ed Rhodes Award recipient. Instead of speaking on her behalf, I asked Samantha to write a little summary of the conference she attended and how this experience has shaped her future in forensics! Please enjoy her article and I will sign out by wishing you all a very happy holiday season and joyous new year.

A handwritten signature in dark ink, appearing to read "Jonathan Charron". The signature is fluid and cursive, with a long, sweeping underline.

Criminalist Samantha Houle Receives the Edward F. Rhodes Memorial Award



“My enthusiasm for forensic science is limitless now that I realize the potential impact our careers and work have towards the betterment of society.”

Now that 2020 is firmly in the past, it finally feels like life is returning to a new normal. Restaurants, theme parks, and many other public places have begun reopening their doors. With the last couple of years now a blip in my memory, I am ready to reclaim those years of my youth back. Not only is the world opening again, but so are training opportunities. To help support me reclaiming those lost years, I was chosen for this year's Ed Rhodes Scholarship by the California Association of Criminalists. As a relatively new criminalist, I feel quite humbled being selected for this award. Unlike many CAC members, I do not have many years of experience or any research published yet. My journey into forensics began in 2013. While I was attending college, I was fortunate to be selected as an intern at a nearby forensic laboratory. This hands-on experience is where my love for forensics blossomed. During my internship, I would watch criminalists not only hard at work but who understood the importance and impact their work made in the world. This inspired me to change my engineering degree to best prepare me for a future in forensics. I am currently a Firearms and Toolmark Examiner with the Alameda County Sheriff's Office and have never looked back. My enthusiasm for forensic science is limitless now that I realize the potential impact our careers and work have towards the betterment of society.

In the words of the CAC website, the Edward F. Rhodes Memorial Award's "...ideal candidate should be willing to give some of himself or herself..." to their chosen seminar. I, in no way, can fit into the shoes that Ed once wore; figuratively and literally. However, I feel a sense of pride knowing that opportunities to apply myself will arise. I am young, still a little naïve, but the world is my oyster. There is a sense of profound optimism that comes from lack of experience. Often, I find myself picking the brains of my peers and ask, "has anyone looked into this?" or "what if we did it this way instead?". My curiosity has no boundaries and with greater access to literature and professional organizations, I look forward to satiating that curiosity by pursuing research. I hope in some small way this article is read by young, inexperienced criminalists and sparks interest for them to apply for the Edward F. Rhodes Memorial Award.

As a result of me being selected for this scholarship, a training opportunity was made available. What previously was out of reach due to budget restraints was now possible! I used the Edward Rhodes award money to fund a trip to Atlanta, Georgia for the Association of Firearm Examiners (AFTE) annual training seminar. There, my supervisor, Jason Otis, and I got to bond with many Firearm Examiners over the week-long seminar. I greatly underestimated the importance that professional

organizations play in the support and training they provide to us. I was able to attend the “Glock Armorer’s Workshop”, “Hi-Point Armorer’s Workshop”, and presented my case study on interchanged firearm parts at the PowerPoint slide night. Like my colleagues, I was hesitant to deliver my presentation, but my eagerness and enthusiasm took over and I somehow ended up being the first presenter. At AFTE, I became a certified Glock armorer and ended up developing connections with many other examiners across the United States. To top the conference experience off, I was able to visit many tourist spots in my free time since this was my first time in Georgia. I was able to walk in Olympic Park, visit the Coca-Cola Museum, and the Georgia Aquarium; which is the largest aquatic museum in the United States. I got to stay in the Atlanta Marriott Marquis, which is the same hotel that was used on the TV series Loki and the Hunger Games. I was even lucky enough to eat at Gus’s World Famous Fried Chicken; not once but twice.



Above: Samantha Houle at work in the Alameda County Sheriff's Office crime lab.

None of this would have been possible without the scholarship award money, which covered my travel, lodging, and other seminar expenses. Unfortunately, money can often be the thing that holds us back, but these organizations are here to ease that burden. Being a criminalist that started their career in the middle of a pandemic was difficult. Many training opportunities that my agency would have liked me to attend sooner than later were not being offered. Although COVID didn't stop our careers, it did make it more difficult to find training opportunities. The opportunities are once again becoming available; you just have to be creative and determined to make the difference. We all know a new criminalist. Let's not be afraid to share our experiences and help provide them with the same opportunities. Even if it is just an email that says, “hey check this out”. Whether anything comes out of it or not, your compassion is what makes the difference. Make a difference in someone's life, in someone's career, and

forward that bright eager criminalist an Ed Rhodes Scholarship application.

Below: Samantha Houle working alongside colleague Inge Chandra.



The best thing about the forensic community is how tight knit we are. Simultaneously, we are a small niche that brings together some incredible people. Not only did I get to travel to Atlanta, Georgia for the AFTE seminar, but my career has taken yet another turn. I was recently selected to attend the National Firearms Examiners Academy (NFEA) for the 2022-23 year. NFEA will help my Firearm Examiner training and give me a push to start research. I always dreamed of being a criminalist, from the very first moment I stepped foot in the Contra Costa County Sheriff's Office Laboratory as a young college student. Despite me crashing their Lab Management system while performing a software update, they still took me under their wings and guided me in the right direction to make my dream a reality.

Thanks to my amazing colleagues around the world, I am honored to be a part of the Criminalistics family. In my own small way, I hope to make a difference in the betterment of society. The immense gratitude I have for the CAC cannot be fully described, but I compare it to a large redwood tree. Overwhelming, awe-inducing, and something you just can't fully get your arms around.



Photos courtesy of Samantha Houle.

Remembering George Sensabaugh



Above: The CAC honoring George Sensabaugh in recognition of his retirement at the 2012 Fall Seminar in San Jose.

George was my faculty advisor when I was in the program in the early 1970s. It was an interesting time then as Bryan Culliford had recently come out with *The Examination and Typing of Bloodstains in the Crime Laboratory*. The addition of enzyme analysis seemed to revolutionize the typing of biological fluids as an adjunct to ABO typing methods. George always sought to bring the latest technology into his laboratory sessions in his Biochemical Individuality class. One graduate student at the time, Ed Blake demonstrated an electrophoretic modification allowing one to split an agarose gel lengthwise and stain one portion for Esterase D and the other portion for PGM. Another graduate student, Keith Inman, was doing research on electrophoretic characterization of vaginal and prostatic acid phosphatase and he also demonstrated his research to us undergraduates in George's class.

George had a great sense of humor and often chuckled a few times during his lectures and labs. Lab procedures and protocols were more relaxed back then and George once told us a story about a female student in one of his classes who mouth pipetted a diluted human semen solution, getting some of the liquid in her mouth, and "...was concerned if there would be any consequences..." presumably in the next nine months. George's thesis research related to characterization of protein degradation in dried blood provided motivation for some of my research interests which we would often discuss during office hours.

George also taught Analytical Instrumentation and although I suspect it was not his primary interest, he would develop realistic labs with real world applications. One lab I remember involved the gas chromatographic assays of three different hydrocarbon samples simulating the analytical protocol involved in identification of the origins of oil slicks, an exercise that I had later adopted for one of my classes in Environmental Forensics.

George Sensabaugh, John Thornton, "Sasha" Shulgin were part of a fantastic faculty in the Criminalistics Program at U.C. Berkeley. They were esteemed members of the forensic science community but undergraduate and graduate students alike were comfortable at addressing them on a first name basis. George's

name would often be brought up by faculty at other universities during my job search for a faculty position. He was a mentor, a researcher and a friend and I am thankful I had a chance to be associated with George and the fantastic faculty in the program.

- Douglas A. Ridolfi



Above: George Sensabaugh's wife looks on with admiration as he addresses his retirement banquet guests.

George was a penultimate scientist, teacher and friend. He was eager to teach and to think about the future in forensic science. He was a magnificent story/history teller and could bridge past history to our future. He was a friend and I will miss him very much.

- Carol Hunter

May the soul of the deceased rest in peace, my condolences to the family and members of CAC.

- Aminu Ahmadu Michika
Adamawa State, Nigeria

George Sensabaugh and I were colleagues and friends for over half a century. I first met him in 1964 and then, later, the two of us shared the teaching in the criminalistics program at Berkeley. As Professors of Forensic Science, I saw him on almost a daily basis. He was an excellent professor, an excellent scientist, and a wonderful human being. He was slow in speech but quick in thought, to the benefit of all of us. In my dealings with him, and in his dealings with students, he was consistently considerate. I found him to be a gentleman in every possible way. At Berkeley, we found a good division of teaching responsibilities, and of research. He was interested in biology and excelled in it. George explored. He created. He set an example for what a forensic scientist should be. With students, he was generous with his time, energy, and resources, and unselfishly committed himself to causes other than to himself. He did have a sense of humor, droll at times. I spoke with him on the phone just two days before his passing, and we exchanged jokes. And I recall back in the late 1980's telling him, somewhat tongue in cheek, that he and Kary Mullis would be forever remembered as the leading people in DNA typing. George looked at me and said, "Who is Kary Mullis?" And then, (and for those who knew him this might be a surprise) -- he once confided in me that he liked rollercoasters!

In his career, he published over 200 research publications. As an example of his eclectic interests, consider these: *The Last Half Century of Criminalistics in North America - Technology Ascendant, Science in Decline* (2015) with *Characterization of Genetic Diversity and Population Structure with Staphylococcus Chromogenes by Multilocus Sequences Typing* (2021). It is difficult for me to put down in writing exactly what George meant to me, and to his students. He is one of the best people I've ever had the honor to know. In the past years he had health problems, but the suffering he experienced is not the prism through which he saw the world, and should not be the prism through which others should see him. He will be greatly missed.

- John Thornton



Above: George Sensabaugh congratulated for his accomplished career in forensic biology.

As an undergraduate in chemistry at Berkeley, I was interested in forensic science, but had no idea how to get into the field. I became acquainted with two CAC members and Cal grads, Brooke Barloewen and Kevin Andera, who told me to contact George Sensabaugh. I was intimidated finding a professor I had never met in a department and building I was totally unfamiliar with. Coincidentally, I was doing undergraduate research under a chemistry professor and found out that he was collaborating with George, and that gave me an opportunity to introduce myself. I informed him I was interested in forensic science and, as luck would have it, he was in the early discussions about a new forensic science graduate program at UC Davis. He was glad to have a guinea pig to help him organize the framework of an introduction to forensic science class and I was excited to learn from him.



Above: George Sensabaugh with dear friends after visiting the Burning Man exhibit at the Oakland Museum.



Above: John DeHaan introducing George Sensabaugh at the 2012 Founder's Lecture.

Each week, George would assign a number of journal articles and chapters of books to read and we would discuss them the following week. I am not sure if the state of George's office at the time that I was there is similar to memories of those who studied under him before or after I did, but there were stacks of books and journals almost to eye level. I remember being amazed at the quantity of them and wondered how he could know where anything was located. George would invariably add to the reading list by remembering another article that would fit well with the others he had assigned and would walk to a stack of journals, pick some spot in the middle of the stack and extract a printed copy of the exact one he was looking for. I was impressed how his brain had catalogued everything and what looked like clutter to me was in reality an extremely organized system for him.

When I would return the following week, George would typically declare "I want a mocha! Let's go get mochas." We would take the short walk from his office to his favorite café and discuss forensic science as I tried not to be distracted by the chocolatey foam on his mustache. After lectures in large auditoriums with more than 300 other students, the intimate interaction with a professor who truly cared for his students was an opportunity that I found both humbling and heartening.

As our semester was wrapping up, I remember being in George's office when he asked me where I was planning to work. The internet was in its infancy

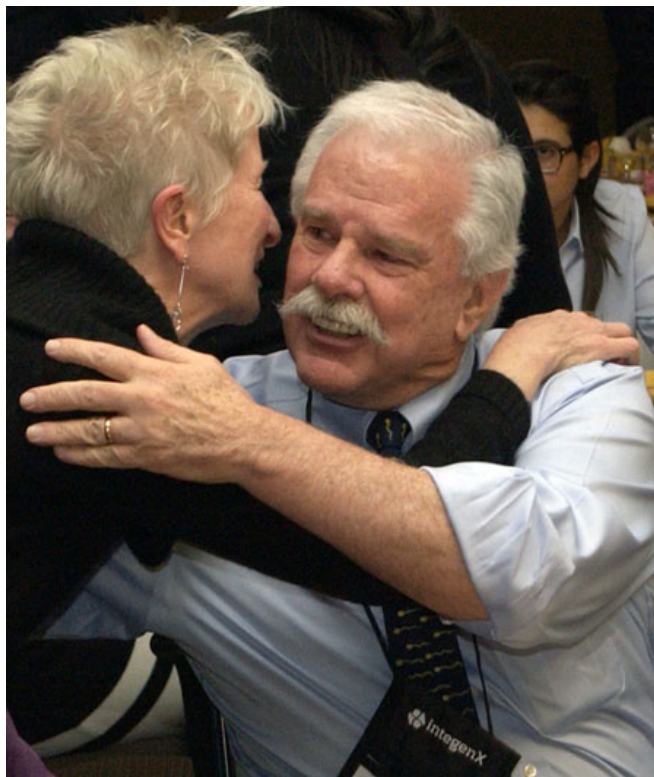
Below: George Sensabaugh enjoying a CAC Seminar with friends.



then, so finding open jobs was not as straightforward as today. I didn't even know there was a crime lab in Berkeley, but George called the DOJ Berkeley DNA lab and told them that he had a student that they should hire. As a chemist, I hadn't really considered DNA as an option, and hearing him vouch for me gave me anxiety that I might not live up to his recommendation, but George assured me that I would be fine. George also implored me to attend the CAC meeting in Monterey. Although the STR validation talks were a bit boring for this chemistry student, it opened my eyes to the breadth and depth of criminalistics.

I owe George for my career and the many friends I have made through the CAC. I can't imagine what my life might be like if I didn't meet such a caring, intelligent, patient person. He will be greatly missed.

- Adam Dutra



Above: Warm farewells to George Sensabaugh from colleagues celebrating his retirement in 2012.

Photos courtesy of John Houde, Carol Hunter, and Wayne Moorehead.

Education in Forensics

An Interview with Dr. Ashley Hall, Director of the UC Davis Forensic Science Graduate Program



Here at the CAC, we focus a lot of our energy on sharing stories on what is happening in the world of forensics. Much of our content deals with current criminalists, but I wanted to create a resource for all of those who are reading this for inspiration and advice to get into the field. Over the next few issues, I intend on highlighting the multitude of educational institutions throughout California that have a thriving forensics program, both at the undergraduate and graduate level. I chose to first interview a local-to-me university since they have a new program director, Dr. Ashley Hall, and I personally know many criminalists who have graduated from this program. In this interview, you will get to know a lot about the program she is running at UC Davis, as well as some information about her background and vision for the programs.

Jonathan Charron (JC): I want to start by saying thank you for agreeing to this interview and for being the first in my series related to education in forensic science. I want to start by learning a little about the program at UC Davis. Can you tell me what sort of degree options are available within your program? Can you include some highlights of some of the different classes that you offer?

Ashley Hall (AH): Thank you for the opportunity to talk about our program.

We offer a Master of Science in Forensic Science (MSFS). In a series of core courses, students get an overview of the fundamentals of forensic science - from ethics and quality assurance, through the sciences, to issues in the courtroom. In Homicide Crime Scene Investigation, students learn the basics of CSI, culminating in a mock crime scene at the Forensic Science Center.

After their core courses, students can choose from two program tracks - DNA or Criminalistics.

On the DNA track, students are taught the methods in body fluid identification and DNA analysis that are currently in use in operational labs, as well as the principles of population genetics that give DNA evidence such power. In the Principles and Practices of DNA Typing, students can try their hand at DNA profiling, from extraction to genotyping. This year we will be introducing to students to next-generation sequencing. This is a cutting-edge sequencing technique that is set to revolutionize how we look at DNA evidence. Students will perform the sequencing experiments and learn how to evaluate the genomic data they generate.

On the Criminalistics track, students are taught the methodologies, applications and interpretations of forensic instrumental analysis, trace evidence, drug chemistry, and toxicology. In the Forensic Science Analytical Instrumentation lab, students learn the techniques currently used in operational crime labs. Students perform hands-on experiments in alcohol analysis, controlled substances and ignitable liquids using GC, GC-MS, LC-MS/MS and FTIR.



JC: Can you give me some insight on the day-to-day life of the forensic students at UC Davis? Is this program comprised of full-time students or criminalists currently working in the field?

AH: The program is primarily composed of full-time students. The majority of the Forensic Science core courses are offered in the evening, so we do have a part-time option that would allow criminalists working in the field to complete their Master's Degree in the evenings while still working during the day. When they are not in classes, students can work on their thesis research, spend time studying in the study space available at the Forensic Science Center or get involved with the Forensic Science Student Organization (FSSO). The FSSO is headed by four officers – the President, Vice-President, Treasurer and Social Media Officer. They plan activities and fundraisers throughout the year. Currently, they have decorated the Forensic Science Center for Halloween and are planning a Halloween Horror Movie Night. They can be found on social media: Instagram (davisfssso); Twitter (@DavisFSSO); and Facebook (Forensic Science Student Organization – UC Davis).



JC: How about the instructional staff? Are your instructors comprised of purely academics or current criminalists?

AH: To provide the students with a well-rounded and current education in forensic science, both academic



and operational forensic scientists teach in the program. Four of us are members of the UC Davis faculty, with expertise ranging from DNA to protein to toxicants. Current operational scientists in the program teach a variety of subjects such as toxicology, microscopy, ethics, population genetics, fingerprints, trace evidence, and spectroscopy. The combination of academic and operational forensic scientists provides a comprehensive education in forensic science with experience and real-world examples.

JC: Now on to some questions about you! Tell us about your journey in the world of academics and forensics that led you here to UC Davis.

AH: My background is in Forensic Biochemistry. I did my graduate research at the National Center for Forensic Science at the University of Central Florida. After grad school, I went into the defense industry. There, I worked on human and microbial forensics. After about 5 years, I left industry to take my first academic post at the University of Nebraska-Lincoln (Go Huskers!). My next academic post was at the University of Illinois at Chicago. At both institutions, I taught courses in DNA and body fluid ID. My research focused on touch





DNA analysis, and the establishment of a DNA profile database that can be used in educational exercises – I call it FauxDIS. I am continuing that work here at UC Davis – NIJ just funded my grant to continue the research in touch DNA!

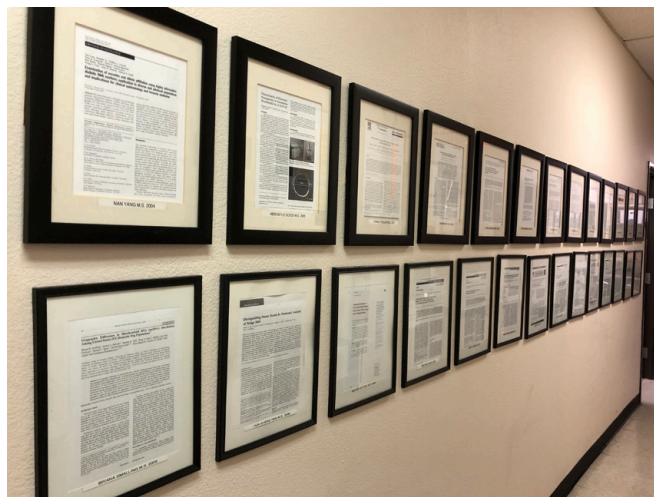
JC: What are your thoughts about the current state of education in forensic science? Why is specific Forensic Science training so important? Do you feel that there is an adequate number of programs available?

AH: Education in forensic science is so important. In programs like the one at UC Davis, our job is to educate forensic scientists who may be new to the field or seeking an advanced degree. We hope to provide them with the education in the theory and practice of forensic science that prepares them to be successful in an operational lab training program and as practicing forensic scientists.



I am happy with the way forensic science education has improved in the past couple decades, and there are currently many excellent programs that can be found in every geographic region in the U.S.

Forensic science programs have developed a rigorous science curriculum, evolving to meet the current needs in forensic science. In the late 1990s and early 2000s, NIJ-sponsored working groups published reports recognizing the need for an accreditation system for forensic science education programs and recommending sample curricular guidelines. In 2004, the American Academy of Forensic Sciences took up the cause and established the Forensic Science Education Programs Accreditation Commission (FEPAC), which set forth a set of accreditation guidelines for undergraduate and graduate forensic science programs. As with any accreditation system, the goal is to recognize and distinguish high quality programs.

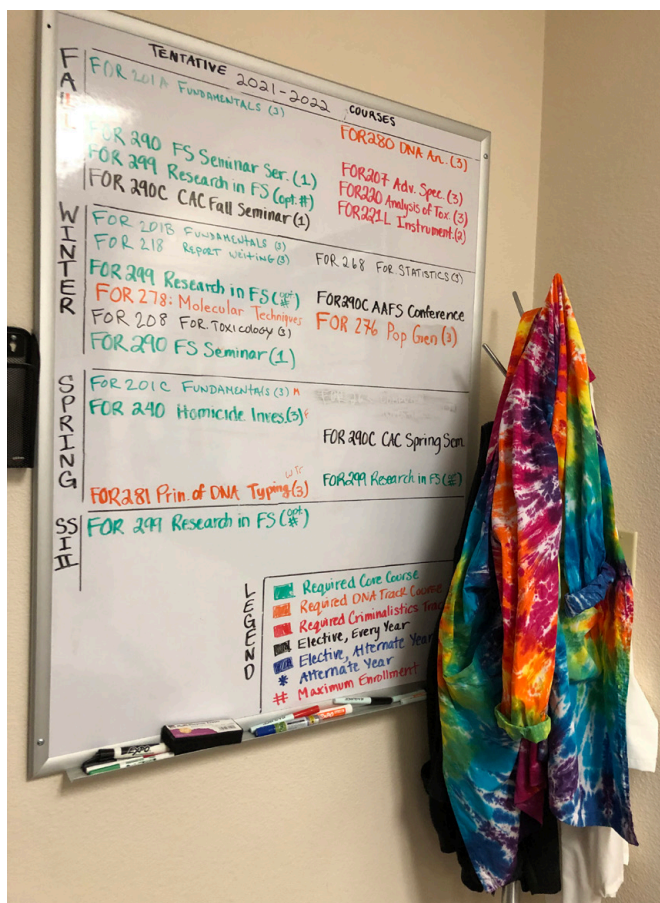


I have seen the results of instituting accreditation standards first-hand. I am trained as an FEPAC auditor. I had the opportunity to participate in the on-site audit of an undergraduate program last month, and the quality of the program that grew to meet the standards was impressive.

At UC Davis, we are preparing to go up for FEPAC accreditation. When we are successful, we will be the only FEPAC-accredited program in California!

JC: Forensic Scientists face a set of unique challenges in that the skills needed to be a competent examiner often reach beyond the science. What do you feel is the role of a university-based forensics program in the overall preparation for the real world?

AH: Our role is to educate the new forensic scientists. Our goal is to provide them with the knowledge and basic skills they will need to successfully complete rigorous training programs in operational labs and become excellent forensic scientists.



JC: Do you feel that other key components to a criminalists job, (such as photography, public speaking/ testifying, understanding general judicial proceedings, and ethics to name a few) the responsibility of the student to supplement in their university experience, or do you feel that these types of auxiliary components should be included into the core forensic education programs?

AH: I think a good forensic science program introduces students to topics such as these. For example, in our three-quarter Forensic Science Fundamentals course, we have 9 hours of lecture on ethics and professionalism, 9 hours on quality assurance and accreditation, and a full half-quarter on forensic science in the courtroom taught by a Deputy Attorney General for the California Department of Justice. The lessons culminate in a mock court proceeding with the students testifying as expert witnesses.

A program should also fully support the students supplementing their university experience, helping students identify opportunities as much as possible. For example, here at UC Davis, we encourage students to do internships at operational crime labs; we can award thesis credit if the student is involved in research for the internship. One of our great instructors also sets up a tour of the operational lab where he works. Last year, we were touring all morning – people from each section

took the time to talk with us and answer questions. The students are also notified when their instructors testify in court, so they can attend and watch if possible. We are always looking for ways to increase students' exposure to all things forensic science!

JC: What do you see as being one of the biggest challenges for students in your programs when it comes to acquiring a position at a laboratory as a criminalist? What are some steps your program takes to make your graduates more competitive?

AH: I think the biggest challenge to employment is geography - there may not be positions available in the location where they would like to live. We advise them to get in the field, get experience and watch for a position to open. With experience, they will be even more competitive.

Our students are very competitive for positions in operational labs. The curriculum has been designed such that graduates meet national educational standards in the various disciplines, not just at the entry level but for future advancement to leadership positions.



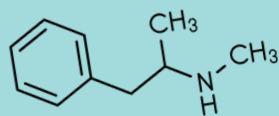
JC: I want to thank you for taking the time to talk with me about your program at UC Davis and some of your thoughts about the role education plays in training a new wave of criminalists. Do you have any final thoughts or advice for any students that are pursuing a career in forensic science?

AH: Thank you! It's a funny business we're in – but it is so rewarding. What you do on the bench makes a real difference.

If there is a forensic science education program that you would like to see featured over the next few issues, please reach out to me at editor@cacnews.org.

Photos courtesy of Sarah Hegenbart.


NATIONAL FORENSIC SCIENCE WEEK



2022

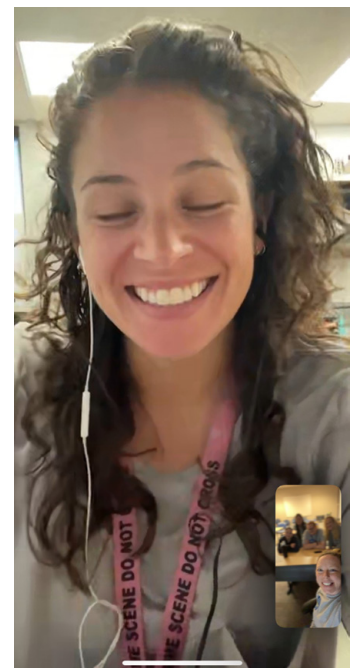
September 19th - 23rd

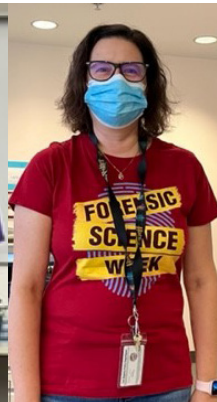
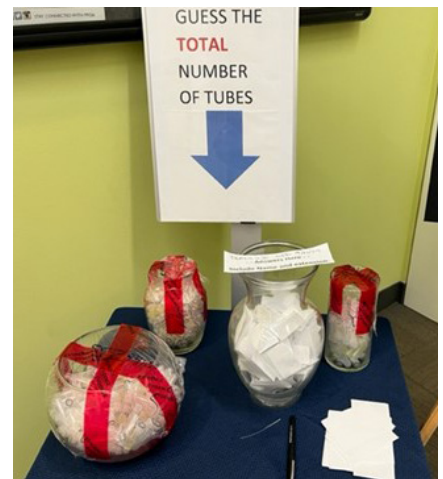
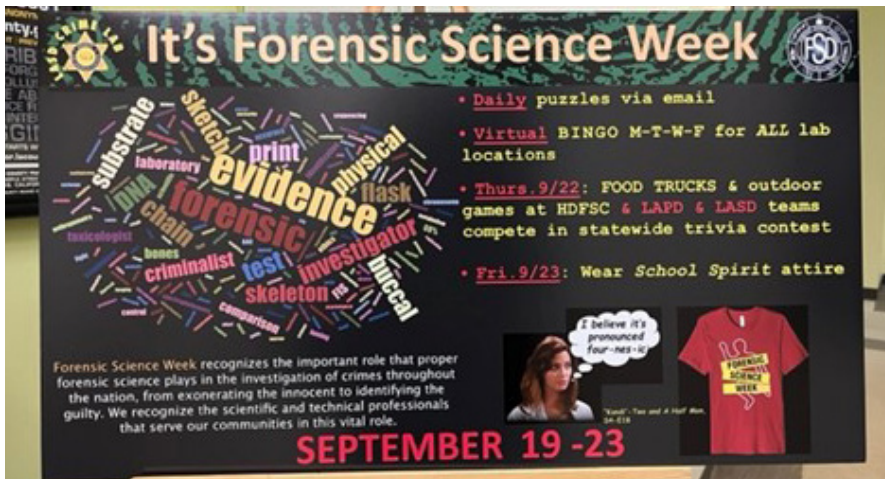


O	C	L	A	B
Has been a juror	Has gotten in an accident in a county car	Has been in more than one section	Has talked on the phone with suspects	Has worked a scene on Christmas Day
Has received a work-related award	Has participated in Baker 2 Vegas	Has never testified	Has picked maggots out of decomposed tissue	Has been in a helicopter for work
Has worked at another forensics laboratory	Has gotten their work published		Has appeared in the media for a case	Has visited at least 5 police departments in the county
Has a family member in law enforcement	Has gotten locked in the stairwell	Has worked the largest mass shooting in OC	Has traveled overseas for work	Has testified in a jail
Has trained in TLC	Has testified before the grand jury	Has audited another lab	Has forgotten their keycard	Has held three different job classifications at OCCL



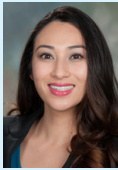
From trivia to delicious treats to bingo, National Forensic Science Week 2022 was a blast!





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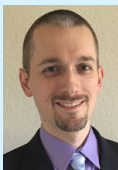
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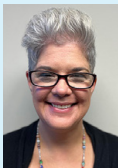
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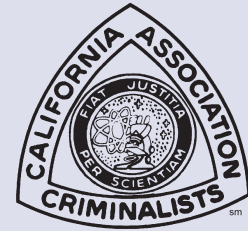


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