

The CACNews

News of the California Association of Criminalists • Second Quarter 2012



The Proceedings of
Lunch

10 Years
with
Norah & Keith

The President's Desk

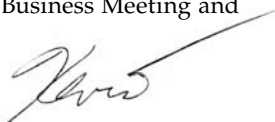
In Recognition

This is my last President's Desk message, and in the spirit of the recent Academy Awards, I'm going to use it to say a few brief thank-you's. (Fortunately for me, there's no band to play me off when I get too wordy, or the much more effective method employed by the Ig Nobel Prizes: a little girl repeatedly yelling "please stop, I'm bored." Sometimes it's good to be the President.) First, I have to thank the other members of the board of directors for doing their jobs so well. I don't think people realize just how badly our association could be damaged by an incompetent officer. Fortunately, you the membership have done an excellent job selecting board members. There should be candidate statements for the upcoming election in this issue, so make sure you take the time to read them. These people are going to make a big impact on your organization. I would especially like to thank President-Elect Todd Weller and Immediate Past President Adam Dutra for their help dealing with several critical issues that arose while I was grappling with a personal emergency. Fortunately, they were able to keep things running smoothly while I was unavailable.

The organization usually does run smoothly thanks to the help of all of our committee members. Most of the work of the association is actually done at this level. I'll repeat my advice from an earlier issue: if you want to get more involved in the CAC, join one of our committees. As president, it is very satisfying to hand off a policy decision to a committee chair and watch them put it into practice. Sometimes our committee chairs have to be quite tenacious to accomplish their goals. For example, our Historical Committee, chaired by Alex Taflya, has a plan to professionally archive over 50 years of CAC documents at the Hertzberg-Davis Forensic Science Center. This would organize and preserve irreplaceable documents, photographs, and videos, but it is quite expensive. The board is working with the committee to find the money to complete this project, hopefully in the next year. Another group I would like to single out for special recognition is the Seminar Planning Committee (SPC). Not satisfied with the excellent work they have done procuring seminar hosts (not an easy task); the board has decided to give them more authority over budget and planning. The goal would be to leave the hosting lab with the job of putting together a technical session, while the SPC takes care of the logistics. This is a new direction for the SPC, but if they are up for the challenge I believe this will result in even better seminars while still balancing budgets.

Finally, I'd like to thank our webmasters, Eric Haling and Mark Traugher. I helped design the association's first website back in 1998, and it has evolved by orders of magnitude since then. I have yet to set Eric and Mark a task they couldn't handle. Please take advantage of the many features on the site, such as the public discussion forums, the membership directory, and the *CACNews* archive. (And just to make the web gurus do more work, I've asked the recording secretary to look into archiving board and Business Meeting minutes on the Members Only site.) If you have any suggestions to make the website more useful, please contact me or the web team and let us know.

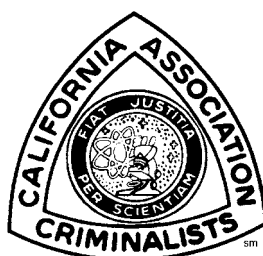
In my last few months as president, I'd like to hear more feedback from the members. Are you getting what you need out of the CAC? Do you have ideas for improvement? Is there something about the CAC you just don't like? In the last newsletter I floated the idea of forming a committee for student issues. If you are a student, teacher, or administrator, I need to hear from you on this subject. The CAC has proposed a National Code of Ethics, do you have an opinion on the Code's contents? If so, please share! We have regular study groups and seminars. Do these live up to your expectations? The board needs to hear the opinions of the members in order to make decisions that benefit us all. So, please contact me (president@cacnews.org), post on the website forums, or stand up at a Business Meeting and give your two cents. I promise I'll be thankful you did.



**Are you getting what
you need out of the
CAC? Do you have
ideas for improvement?
Is there something
about the CAC you just
don't like?**



Kevin Andera
CAC President



Editorial Secretary Greg Matheson
editor@cacnews.org

Art Director John Houde/Calico Press, LLC
(206) 855-1903
john@calicopress.com

Technical Jennifer Shen
(619) 531-2655
jshen@pd.sandiego.gov

Webmasters Mark Traugher, Eric Halsing
(951) 361-5000
webmaster@cacnews.org

Advertising Contact the Editor

The *CACNews*, ISSN 1525-3090, is published quarterly (January, April, July, and October) by the California Association of Criminalists (CAC).

The CAC is a private foundation dedicated to the furtherance of forensic science in both the public and private sectors.

Please direct editorial correspondence and requests for reprints to the editorial secretary.

Copyright © 2012 The California Association of Criminalists. All Rights Reserved.

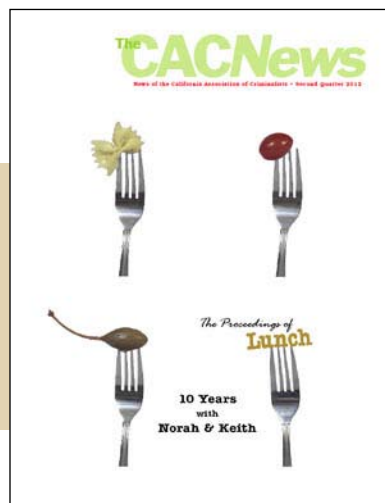
Notice to Contributors: We publish material of interest to our readers and are pleased to receive manuscripts from potential authors. Meetings and course announcements, employment opportunities, etc. are also solicited. Advertisements are also accepted, although a fee is charged for their inclusion in *The CACNews*. Please contact the advertising editor for further information.

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.

The deadlines for submissions are: December 1, March 1, June 1 and August 15.

The CACNews

www.cacnews.org



On the cover...

Norah and Keith's column, "The Proceedings of Lunch," has entertained and challenged us for a decade. Bon appétit!

INSIDE

"The President's Desk" *President Kevin Andera*.....2

CACBits / Announcements / Classes.....4

Yesterday's News.....5

Editor's Desk: "Generalist vs. Specialist"
Greg Matheson.....6

Proceedings of Lunch: "Thinking Allowed and thinking aloud"
Norah Rudin and Keith Inman.....8

"Head to Head"
Keith Inman interviews Raymond Davis.....12

Ethical Dilemmas: "Fulfilling Work Requests"
Carolyn Gannett.....16

CAC Board Candidates18

CACBits



Friday the 13th Lucky for Some

Dean Gialamas (above) provides commentary against a backdrop mug-shot of Greg Matheson. Greg's well-attended roast/retirement celebration this past January was on Friday the 13th. Luckily, Greg has agreed to stay on as CACNews editor, but retired from a small position at the LAPD laboratory.

Book Signing at Bakersfield

Raymond Davis will be signing his book, "Dark Side of Justice," at the Bakersfield meeting. Raymond talks about the creative process in writing his first novel on page 12 of this issue.

Choose Your Seminar Workshop

There's sure to be something for everyone at the upcoming seminar. Just look at this list and register for the one(s) you find appealing.

MICRO-ANALYTICAL TECHNIQUES: This workshop will enhance the attendees' knowledge and skills in working with

stereo light microscopes (SLM), polarizing light microscopes (PLM), and many types of microscopic evidence. Particles come in various shapes and sizes. Evidence can be equant (quartz), fiber-like (hairs and fibers), and sheet-like (cocaine or mica) as examples.

A review of polarizing light microscopy (yes you'll understand it!) and its practical application to analysis of evidence (you'll have hands-on instruction) will be among the strengths of the Micro-analytical Techniques workshop presented by Wayne Moorehead (above, right). Each of 20 participants will be able to use a microscope. A stereo light microscope and polarizing light microscope will be available for each team of two! (Provided by McBain Inst.)



Topics/goals: visualize and recover particles quickly with the SLM by enhancing contrast; use birefringence with an SLM to find particles; double the use of microscope slides; establish the microscope ocular micrometer scale; use Cargille liquids to identify unknowns; set up any PLM properly; limit search area on a microscope slide to find particle of interest; apply the most beautiful chemistry experiment according to the ACS; determine optical properties for identification; make tools to assist in particle processing and analysis; clean particles for instrumentation sample prep; utilize different micro-crystal test methods; collect and preserve particulate evidence; use different properties of particles for separation; lots more...

DUI WORKSHOP INCLUDING DRIVING SIMULATOR: A full day (Monday) is planned with a class size limited to just 40, Chair Dan DeFraga says, "The workshop will consist of an impairment study of (8) subjects who will be evaluated driving on a simulator; tested with Portable Evidentiary Breath Testing System (PEBTS) units and blood draws; and observed performing standardized field sobriety testing and DRE evaluations.

The "TRADITIONAL" DNA WORKSHOP: Monday begins a full day with 100 of your closest DNA analysts. Brenda Smith chairs. This one-day workshop will cover current topics related to forensic biology and highlights Greg Hampikian, Ph.D., a professor at Boise State University and DNA expert from the Amanda Knox case, who will discuss mixture interpretation. Tentative topics include "Trouble-shooting DNA Quantification" (panel discussion), SWGDAM Guidelines, Expert Systems, and Extraction Improvements.

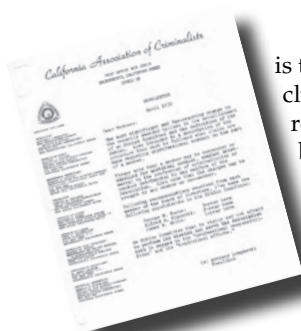
SHOOTING INCIDENT RECONSTRUCTION: On Tuesday, Chris Coleman (Contra Costa), Mike Giusto (CCI/DOJ) and Bruce Moran (Sacramento) give their ever-popular class. Dianna Mathias chairs. The shooting part will take place away from the hotel (BPD Shooting Range—a short drive from the hotel).



TRUEALLELE CASEWORK SYSTEM software will be demonstrated at the upcoming CAC seminar.

cont'd on page 15

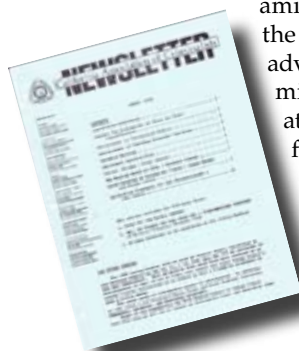
Yesterday's News



- 40 YEARS AGO IN THE CACNews...

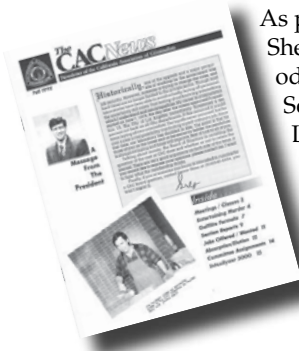
The most significant and far-reaching change in the recently amended by-laws is the establishment of an Ethics Committee and the definition of its duties. Also included is a description of the procedure that must be followed when claims are made regarding unprofessional conduct on the part of a member. Please note that a member may be suspended or expelled for unethical conduct, conduct detrimental to the profession of criminalistics or conduct detrimental to the welfare of the association. Also note that the charges may be brought by any member on non-member.

—Anthony Longhetti, CAC President, April 1972



- 30 YEARS AGO IN THE CACNews...

The results of the original analysis are incriminating to the defendant, but the re-examination establishes that this evidence is neutral in its impact on the factual issues in the case. Realizing that, if he is called as a witness he would have to testify about the adverse (to the defendant) evidence as well as the mistakes made by the law enforcement laboratory, the criminalist and the defense attorney decide to have the “incorrectly” analyzed evidence submitted to another lab for a second re-analysis. The second defense criminalist, then, could testify without any knowledge of the “adverse” aspects of the evidence. What are the ethical responsibilities of the first defense criminalist in this case? Has he “knowingly or intentionally assist[ed] the contestants through such tactics as will implant a false impression in the minds of the jury” (CAC Code of Ethics III.H.). —Peter Barnett, “Ethical Dilemma,” March 1982



- 20 YEARS AGO IN THE CACNews...

As part of the “Back-to-Basics” sessions, Dave Stockwell from San Bernardino County Sheriff’s Crime Lab lectured on Gm/Km. Brian Wraxall from SERI, lectured on methods and interpretation of Gm/Km results. David Sugiyama from Forensic Science Services, discussed his experiences using Gm/Km in casework. Ron Linhart from LASD, presented Gm/Km results obtained from three laboratories from a homicide case; discrepant results and other issues were discussed. The session was videotaped, contact the Training and Resources Committee. Future “Back-to-Basics” sessions will be on ABO, Gc, and Transferrin. —Barbara Johnson, Reg. Dir. South, Fall 1992



- 10 YEARS AGO IN THE CACNews...

I can’t tell you how many cops came up to me (ever so proud to be wearing my SFPD uniform) and said, “Wow, Frisco. . .you’re a long way from home” and I would explain about my grandma dying and spending an extra few days to visit and volunteer. After a while, I came up with “Hey, I’m closer to home than you think: born and raised on Staten Island.” To which, most replied, “No, sh—, well, all right, thanks for being here.” . . . In the short time that I spent sifting through the rubble, and finding maybe one answer to one family’s prayers, I felt an awesome sense of belonging, camaraderie, and purpose. After much loss in my immediate family in the past few years, I drew great comfort and pride to know that I am part of a much larger family — the one in blue. —Pam Hofsass, “Beyond Blue,” 2nd Q 2002

Enjoy reading the rest of these articles and all the CACNews archives at www.cacnews.org

The Editor's Desk

Generalist vs. Specialist: a Philosophical Approach

In February, the American Academy of Forensic Sciences (AAFS) held their annual meeting in Atlanta, Georgia. One of the differences between AAFS meetings and CAC Seminars is that attendance at the AAFS meeting is significantly higher than CAC Seminars. The AAFS is composed of many different sections, not just criminalistics. The diversity of forensic science disciplines is what gives the AAFS its strength and provides added value to attending its annual meeting.

We all know how valuable attendance at the CAC Seminars is in advancing your knowledge of your current assignment and your overall knowledge of criminalistics. Though I would never want you to attend an AAFS meeting over a CAC Seminar, if the opportunity presents itself, you should avail yourself whenever possible. The diversity of the AAFS provides you with the opportunity to expand your knowledge of forensic science and make you a well rounded professional. In addition, there are many opportunities to hear technical and non-technical presentations that will expand not just your technical skills but provide you with new casework approaches and philosophies.

I found this year's AAFS meeting to have some excellent opportunities to expand my mind regarding the philosophy of forensic science. Before sharing with you the presentation I found most enlightening, we need to discuss why having a firm grasp on the philosophy of our profession is as essential as mastering the technical steps. For those of you at the beginning of your career, you are probably full of learning all the new techniques and procedures required to analyze evidence items. You want to ensure you get the right answer, don't go beyond your laboratory's protocols, and ensure you are ready to defend your work in a court of law. You may feel there just isn't enough time or energy to learn policy, procedures and philosophy. If you want to be a technician, performing tests on requests, then just focus on the policies and procedures of your laboratory. If you want to be a scientist and a professional, learn the policies and procedures, but go much further and learn the philosophy of your profession. Understand the importance of why things are done the way they are done, the scientific method, the viewpoint of the critiques, the issues of bias and the importance of ethics.

The presentation titled "The Philosophical View of Forensic Science" by Max M. Houck, Ph.D, was thought-provoking and very much worth the time spent. I have known Dr. Houck for many years so I will take the liberties to refer to him as "Max" for the remainder of this editorial. His presentation included a variety of statements, definitions and comments. Highlights were:

- Forensic science is the science of spatial and temporal relationships between people, places, and things involved in crimes.
- It is a historical science bounded by principles that allow for reconstruction of past events.
- Individualization
- Uniqueness, not Individualization
- Transfer
- Relationships and Context
- Uniformitarianism
- Correlation of Parts
- The Law of Superposition
- Lateral Continuity
- Chronology

"A full philosophical treatment of forensic science is needed to provide the foundation for improving the discipline and profession"

—Max Houck



Greg Matheson
CAC Editorial Secretary

Each of these bulleted items represents a significant amount of information that I will not individually delineate but which are core to the philosophy of forensic science. Hopefully, Max will consider providing this talk at future venues to continue to spread the important message he has to share. His presentation did not provide nuts and bolts or how-to types of processes, but it did provide an essential philosophy and definition of the profession of forensic science which, if known and understood by everyone who calls themselves a forensic scientist, would understand, as Max said, “A full philosophical treatment of forensic science is needed to provide the foundation for improving the discipline and profession.”

Beyond the statements, definitions and information Max provided in his presentation he provided me with an “ah-ha” moment which resolved, in my mind, the dichotomy which exists between the generalist and specialist concept. Issues surrounding specialists and generalists have raged in our profession throughout my entire career. An excellent example of the ongoing character of this issue is illustrated elsewhere in this *CACNews*. The first Proceedings of Lunch (PoL) column dealt with it, and, like my column, was triggered by the comments and writings of Max. Though the opinions attributed to Max in the PoL from 10 years ago vary significantly from what I recently heard.

To digress a moment: For as long as I can remember, there were opposing philosophies in criminalistic laboratories—crime lab staff as a generalist vs. a specialist. In general, forensic science practitioners in California and the west coast were identified as generalists. The rest of the country identified themselves as specialists. Californians et al were accused of being generalists or criminalists who claimed to work in and have knowledge of a large number of forensic science disciplines. A derisive definition could be that a generalist is a “jack of all trades but master of none.” Specialists were described as forensic scientists hired to perform casework in a specific forensic discipline and, unless their employment status changed, they would work that discipline for the entirety of their career.

Using the LAPD Crime Lab as a typical California generalist example, scientists are hired as criminalists, not drug chemists, DNA analysts, etc. Once hired, a criminalist could be assigned to any unit in the laboratory, trained in the policies and procedures of that unit and testify to their work as an expert in that field. On a semi-regular basis, LAPD criminal-

ists were given the opportunity to request a transfer to another unit. If approved, they could be assigned to a new unit and, after undergoing training and competency testing, go from being an expert in a unit such as controlled substances to one as different as serology. In addition, all criminalists were required to respond to crime scenes to collect evidence

for future analysis. This process allowed LAPD criminalists to obtain a broad view of the profession over the course of their career. I always liked this arrangement because I felt it created well-rounded professionals able to reach a higher level of broad professional expertise. This laboratory assignment philosophy was similar to many laboratories in California. In addition to how assignments were made in laboratories, the specialist vs. generalist debate has been a significant factor in the development of the certification program for criminalists. The CAC started a certification program for criminalists. This program was eventually used as a model for the American Board of Criminalists (ABC). The CAC program was eventually discontinued in favor of a single national certification program. The ABC has adjusted their program several times to try to address the specialist vs. generalist issue. The ABC understands the importance of having a broad view of the profession to perform at a high level. Unfortunately, it is most likely that the number of certified criminalists has been limited because of the perception of the ABC tests having too much of the California generalist leaning.

Unfortunately, reality and evolving technology has made it increasingly difficult to maintain the concept of a forensic science generalist as it relates to a scientist's assignment. As the director of the LAPD Criminalistics Laboratory it became necessary for me to at least partially abandon the concept of laboratory wide transfers of criminalists between units or sections. The increasing complexity of scientific analysis, specific coursework requirements to perform an analysis, and long training times has resulted in a necessary shift to a criminalist as a specialist. In addition, the size of the laboratory and the complexity of the work in their primary unit of assignment made it impossible to continue the practice of having all criminalists trained and ready to respond to crime scenes.

Maybe I'm a slow learner or not a deep thinker, but it took Max's talk to finally show me a resolution to the ongoing generalist vs. specialist debate. It is my desire that the profession seriously consider a paradigm shift in the focus of the generalist vs. specialist concept and finally embrace the reality that every forensic scientist became a generalist to improve the forensic science profession.

The way to understand and embrace the requirement and need for every forensic scientist being a generalist is to separate the practitioner's technical assignment and their daily analytical duties from the generalist vs. specialist philosophical mind set. You can spend your entire career doing exceptional DNA analysis on casework, but only by having taken the time and effort to learn the broad philosophy and general concepts of forensic science will you truly be a forensic scientist. If we are to maintain a unique professional identity with the goal of doing quality work while “improving the discipline and profession of forensic science” then we must all embrace the generalist philosophy.

As I have espoused before, attend professional meetings and attend presentations associated with your primary technical assignment, but also take the time to attend presentations in other specialties and even papers with titles such as “The Philosophical View of Forensic Science.” By doing this, you will become a positive influence for “improving the discipline and profession” of forensic science.

Thank you, Max, for finally helping me understand how to resolve the specialty vs. generalist debate.



Beyond the statements, definitions and information Max provided in his presentation he provided me with an “ah-ha” moment which resolved, in my mind, the dichotomy which exists between the generalist and specialist concept.

ists were given the opportunity to request a transfer to another unit. If approved, they could be assigned to a new unit and, after undergoing training and competency testing, go from being an expert in a unit such as controlled substances to one as different as serology. In addition, all criminalists were required to respond to crime scenes to collect evidence



Thinking Allowed, and thinking aloud

Ten years of Proceedings of Lunch

At some point in the mid-90's, after we were no longer working in the same place, we (Keith and Norah) began to meet occasionally for lunch to catch up and discuss current issues. For the first few years, much of our discussion and energy went toward writing books, first *An Introduction to Forensic DNA Analysis*, then *Principles and Practice of Criminalistics: The Profession of Forensic Science*. However the discussions continued long past the books, and through the never-ending changes of employment for Keith.

Eventually we decided to capture our musings in some shape or form. They were not sufficiently developed for publication as peer-reviewed journal articles and, as other activities, such as making a living, took priority for both of us, it was pretty clear that we would not be writing a series of academic papers. However, we thought that our ruminations might be of interest to others, and then-editor John Simms graciously agreed to let us try a column-type format in the *CACNews*. Before we knew it, we were writing a quarterly column and our contribution was EXPECTED for each issue. Reminders would start coming in our e-mail towards the end of each quarterly deadline – will there be a POL for this issue? We did miss a couple of issues, but for the most part, the *Proceedings of Lunch* (POL) grew to be a staple of the *CACNews*. Little did we know that, a decade later, we would still be discussing current issues over lunch and dashing off some notes for a quarterly contribution to the newsletter.

From the beginning, we vowed not to care whether our views were popular, or even if anyone read our writings, freeing ourselves to brainstorm, barnstorm, and just generally kick around what seemed current, topical, interesting or worth a look. We thought we were writing mostly for ourselves, and possibly sharing our musings with a few local friends. Over the years, we discovered that people actually READ what we write, leaving us both terrified and humbled. At every meeting we attend, people approach us to let us know that they follow the POL; the usual comment is that, although they always find the content stimulating, they don't always agree with us. That last part is great news, as it confirms that we have done our job of being equal opportunity offenders. The publication of the *CACNews* on-line also means that geographical proximity no longer matters. Did you know that forensic professionals from all over the world read the *CACNews*? The CAC membership can be proud of the extent of the readership of our regional magazine, and particularly the yeoman's work of both the past and current editors, as well as that of our long-standing publisher, John Houde. His contributions were well documented in a previous *CACNews* issue, and every contributor owes much to his careful shepherding of each issue. We quickly decided that this revelation

of wide readership would not change our approach. The POL is meant to capture a casual point-in-time discussion, almost without censorship. Although our columns have become longer and somewhat more formal over time, they remain the repository for our mental machinations which were offered as an excuse for our first named POL (reproduced in this issue for your reading pleasure).

We are often asked how it all happens; how do we take a lunchtime (or plane-time or, with a guest participant, sometimes a phone or e-mail) exchange and condense it into a written piece? To us it is just a natural extension of the way in which we interact, but the process has apparently generated some interest. We never have any shortage of ideas to discuss, as we are both engaged in the practice of forensic science on a daily basis, from the smallest technical details to the largest national policy issues. Our discussions tend to be rather free-wheeling, stream-of-consciousness affairs; unedited they would resemble the writings of Virginia Woolf more than anything fit for a professional offering. Sometimes we have to weed out tangents, while at other times the digressions become the main topic. We do find that the actual act of saying something out loud helps to clarify the idea for ourselves. And, of course, there is nothing like a vigorous sounding board to whip an idea into shape. And because we do often meet for meals, the venue and menu have become part of the shtick.

A look back produces both amusement and amazement at the evolution of both the field and our attitudes over the past decade. One of the most dramatic changes is found over a series of three articles that address the issue of unintentional analyst bias. The first, written in 1997 for the *CACNews*, was entitled *How Much Should the Analyst Know?* This was the precursor to what would become the POL, and in it, we espouse the idea that the forensic examiner should be fully involved in the processing of physical evidence, including a complete

From the beginning, we vowed not to care whether our views were popular, or even if anyone read our writings, freeing ourselves to brainstorm, barnstorm, and just generally kick around what seemed current, topical, interesting or worth a look.



knowledge of the case, selection of evidence and analyses, interpretation, and reporting. At the time, we suggested that, "... one key to a competent professional life is understanding your own limitations and biases, and taking them into consideration in your work." We addressed the issue again in 2004, this time with two of our colleagues, Chuck Morton and Lisa Calandro, as guest contributors to a two-parter, *The Culture of Bias*. It is interesting to see a somewhat more nuanced and less dogmatic consideration of the topic. "Unless it can be determined whether an apparently biased conclusion stems from ignorance, incompetence, or deception, it is difficult to troubleshoot or even categorize the problem. We agree that, in any event, the practical solutions are the same, education and training, blind second reads of data, rigorous internal review, and independent review of cases by qualified analysts." By 2009, of course, we had become fully committed to a structural solution, sequential unmasking, as discussed in *How Much Should the Analyst Know and When Should She Know it?*

In that first named POL, in 2001, we initiated what would turn out to be a long and venerable tradition of inviting various colleagues to discuss with us the topic of the moment. After all, CAC readers would soon tire of hearing just from Norah and Keith. Who better to join us for our flagship column than Peter Barnett, always a voice of reason. We discussed the concept of divisible matter and its three corollaries, which we had introduced in *Criminalistics*, and in which Pete had shown some interest. We feel these concepts have stood the test of time, as has one of "Keith's aphorisms;":

You won't get the right answer,
if you don't ask the right question,
no matter how brilliant your analysis.

Another topic addressed multiple times throughout the years includes the idea that DNA does not exist in a vacuum, but is subject to the same limitations as other forensic trace evidence, including that of transfer. In 2002, as guests of Pierre Margot at the University of Lausanne, we had the opportunity to meet with many of the scientists at that institution, including a brilliant statistician, Franco Taroni. Our discussions with him on the topic of reciprocal transfer inspired the penning of *The Transfer of Evidence and Back Again*. In *Biological Evidence as Trace Evidence: The Forensic Science of DNA Typing*, written the same year, we sought to caution a community infatuated with forensic DNA analysis that DNA evidence is still subject to many of the questions and foibles that encompass any other forensic evidence. These limitations have, in some ways, only expanded over the years as our technical ability to type smaller and smaller samples has exceeded our ability to reliably determine both the strength and significance of such evidence. As such, our lunch time discussion of these topics included *The Urban Myths and Conventional Wisdom of Transfer: DNA as Trace Evidence* (2007), and continued with *How Low Can You Go? Should You Just Say No?* (2010)

We found our discussions broadening to include policy issues as forensic science became the subject of increasing political scrutiny. In *Who Speaks for Forensic Science* (2008), we wrote about the ongoing tension between the forensic community and the innocence community regarding the liability of forensic science in causing wrongful convictions, an unfortunate conflict that continues to this day. Later that same year, we invited Roger Koppl (yes, an economist; think behavioral economics) to discuss with us his ideas for structural change in the practice of forensic science. In *Administer*

This!, Dr. Koppl suggests that the laws of human behavior apply to humans, regardless of what profession they practice. In *Steaks, Stakes and Stakeholders* (2009), we challenged what we considered to be the contamination of a scientific document, SWGDAM 2009, with policy recommendations. It struck us that including policy in a science document unnecessarily separates "... forensic science even further from the greater scientific community." Later that year, we, like everyone else, added our two dollars to the commentary about the then recently issued NAS report. In *Challenging the Canon* (2009), we probe what we believe to be the collective fears of our profession that preclude it from moving forward. We challenged the community to embrace change for the collective good of the criminal justice system. Last year, in 2011, we continued along this path of introspection by articulating *Why Politics is Worse for Science than the Law*. This column was our reaction to what we thought to be an ill-considered implementation of the NAS proposals as offered by the "Criminal Justice and Forensic Science Reform Act of 2011," introduced by the Judiciary Committee of the US Congress. As of February 2012, not only has no legislation been passed, another committee, that of Science, Commerce, and Transportation is working on a competing proposal; after watching their streamed initial hearing entitled "Turning the Investigation on the Science of Forensics," we have somewhat more hope for a proposal that might come from this committee.

Perhaps the *Proceedings* that hit closest to home for many practitioners was last year's *To Err is Human ... (and Inevitable)* (2011). Any analyst who has been working for more than a week has surely made an innocent mistake. Certainly the vast majority of mistakes, while perhaps embarrassing, do not introduce substantive error into a conclusion. But obviously some number of wrongful convictions, or wrongful near-convictions, have been detected; the nightmare that certainly exists is those errors that have not been detected. And they must exist. From what we see as independent reviewers, all the QA/QC measures in the world do not eliminate errors that are undetectable or uncontrollable by those means. We also submit that internal technical and administrative review frequently fails; we know because we detect at least some of those errors upon reviewing discovery. While forensic science is a human endeavor, and therefore is doomed to imperfection, we can at least set up a system that provides the best chance to detect an error. Unfortunately such a system includes elements that many in the forensic community resist: a central error log, full and transparent discovery, and yes, minimization of unintentional bias by structured sequential unmasking procedures. The forensic community must embrace their own humanity in order to best assist the rest of humanity. We'll step down off of the soapbox now.

To conclude on a lighter note, we must credit all of our guest contributors over the years. We are certain that their contributions have greatly increased both the interest in, and the quality of, the POL. We have already mentioned a few, and hoping that we have not missed anyone, the following comprise the remainder: Simon Cole, John DeHaan, Peter DeForest, Jay Siegal, David Balding, and John Butler. Our profound apologies if we missed someone. Note that we have already lined up two great guests for this year, so stay tuned.

Finally, we are grateful to have had the opportunity and the outlet to share with you our musings over the last decade. So it is only left to raise a glass to another decade of the *Proceedings of Lunch*.



*The column that started it all:
"The Proceedings of Lunch" as it appeared in the
First Quarter, 2002 issue of the CACNews.*

As we walked into the restaurant this afternoon, the greeter inquired as to whether we wanted to sit at the counter or in a booth. The difference, she explained upon inquiry, was that those seated at the counter would be served by the bartender, who excelled at mixing drinks, while those seated in a booth would be served by a waiter or waitress skilled in taking our order and providing it at the right time and in the right order. While walking to the booth, we took this as a fitting omen for the meal's discussion, for we had decided to talk about the same kind of division into specialties that has come to characterize much of the present-day work in a criminalistics laboratory. After providing the waitress with some small tasks for both the bartender-specialist and the cook-specialist, we turned our attention to the day's topic.

What had attracted our interest was a short review penned by Max Houck for the *Journal of Forensic Sciences*¹, wherein he took issue with several misspellings and other grammatical shortcomings of a recent book². We are quite certain that the writers of the recent book regret misspelling the name of one of Mr. Houck's co-authors. Aside from these apparent faux pas, one particularly striking observation made by Houck was that the new book would be soured for many readers because of a "generalist" overtone that permeated the writing. He spent a few paragraphs demonstrating to his satisfaction that the specialist was here to stay, a fact he believes is both indisputable and inevitable. Readers were admonished to get over it and get on with the work. This struck us as fertile ground to cover during a pleasant afternoon's conversation. When the bartender's specialty arrived, we started with two questions: What do we mean by the term generalist? And what defines a specialist?

Defining the Generalist/Specialist Debate

Is a generalist one who can analyze more than one type of evidence? If so, how many more than one? Is a trace evidence examiner a generalist, because he examines soil, glass, fibers, and numerous other "traces" that are best observed with a microscope? Or is he a specialist, with his specialty defined as examining small items using a microscope? At this point, a specialist wants to know how a generalist could possibly keep up with all the technical details of every evidence type. If keeping up with all of the progress of fiber analysis is a full-time job, how could one person competently examine fibers, shoeprints, and solid dose drugs as part of his normal duties? It can be done, but not competently, insists the specialist. Norah wondered if a generalist might be a person who worked in a full-service laboratory and transferred every

three to five years into a new section. Keith reminded her that this occurred almost exclusively in California, but agreed that it might indeed qualify an individual to receive the stamp of generalist. Dissenters might suggest that this is similar to divorce being the front for serial bigamy; this type of generalist is not examining many types of evidence at the same time, but examining different types of evidence during periods of specialization in her career.

Shifting the context from the individual level to the laboratory level, Keith has seen different sections in the same laboratory mixing their conceptual metaphors, with one section being named for the evidence type "Serology", while another is named after the process "Comparative." Is comparative evidence a specialty in the same way that some consider serology (and now DNA) a specialty? Why did the serologists rate a special section, when all of the trace and track evidence was lumped into one part of the laboratory's work? And don't serologists compare the typing results from the evidence to the typing results from the reference sample? And who should go to the crime scene, we wondered? Is it a person who is only trained in the obvious type of evidence present at the scene (such as bullets or bloodstains)? What if there are bullets, bloodstains, fingerprints, shoeprints, glass, and ignitable fluids? Do we call six specialists to the scene? Would the firearms specialist know how to preserve the ignitable fluid evidence? Would the fingerprint analyst know how to preserve the blood part of the latent print she was developing? Do we just throw our hands in the air and call out the cast from "CSI"?

Asking the Relevant Question

We weren't sure if our heads were spinning from the interminable questions or the bartender's specialties. Norah suggested that we examine a specific example, and see if some answers emerged. We took a semen stain present on a shirt. The question submitted by one of the attorneys was not the obvious and relatively easily answered "whose is it?", but rather the more subjective "was the semen stain spattered or smeared?" Who answers this question? In this real-life conundrum, the analyst, who had no formal training in this area, went to those in the lab trained in bloodstain pattern analysis and asked them to offer an opinion. The reply was a rather icy, "We only do blood!" What is the specialty involved here? Is it semen? Is it how fluids fly through the air and land with the greatest of ease (and in a specific shape determined by the volume, angle, and velocity)? Is it how semen flies through the air ... you get the idea. Why should we feel stymied at such a simple problem? Has the specialist mentality

Here is where Mr. Houck seems to have missed the point; a common set of principles eliminates the need for the generalist/specialist dichotomy. For example, understanding that the process of individualization is common to evidence types such as firearms, fingerprints, shoeprints, and (probably) DNA eliminates the need to classify the analyst as a specialist or a generalist.

paralyzed us into believing that we are incapable of examining a semen stain and considering all relevant questions, including whether it is a spatter or a smear? If so, this debate must be re-directed, for such paralysis accrues no benefit to our profession.

Historical Basis for the Division

There is clearly some history to the generalist/specialist debate. It appears to derive at least in part from evolutionary differences between those pacified by the Pacific Ocean and those buffeted by the Atlantic. We wanted to invite Dr. Paul Kirk to lunch to provide his historical perspective of the situation, but he was clearly unavailable to offer his insights and contributions to us at this time. A perusal of his writings shows a vigorous advocacy for the generalist approach, although many west coast near-contemporaries (for example, E.O. Heinrich at Berkeley and Luke May in Seattle) also understood and examined a wide range of evidence types. This advocacy and practice stands in contrast to much of the rest of the country, which developed laboratories that employed forensic science specialists. Over the telephone, at professional society meetings, and in certification and accreditation summits, discussions invariably become loud and vociferous as adherents for each position argue their case. Both Keith and Norah believe that, whatever the source of the debate, which at times can be quite rancorous, it has now become a stumbling block to a more fundamental understanding of the nature of criminalistics and the common threads that unite all forensic science analyses.

Norah thought that perhaps the real issue was not whether a person practiced a specialty or was a generalist forensic practitioner, however those terms might be defined, but whether he understood a particular analysis in the context of the case and other potential analyses. This understanding improves the chances of preserving other kinds of evidence and of asking the right question of the evidence for which the analyst is trained to examine. The heart of this training is a common paradigm, or a set of common principles, that are used by the fingerprint examiner, the DNA analyst, the firearms examiner, the trace specialist, the criminalist at the crime scene, and anyone else who undertakes the examination of a piece of physical evidence.

Here is where Mr. Houck seems to have missed the point; a common set of principles eliminates the need for the generalist/specialist dichotomy. For example, understanding that the process of individualization is common to evidence types such as firearms, fingerprints, shoeprints, and (probably) DNA eliminates the need to classify the analyst as a specialist or a generalist. A consensus understanding of the origin of individualizing traits by these seemingly disparate examiners unites them in an appreciation of the value of other evidence, and makes them aware of the need to both search for and preserve it in the context of the specific needs of a case. If all you have is a hammer, every problem is a nail; if you are a DNA analyst, every semen stain requires DNA analysis. But if you have the whole toolbox, you can focus on the problem, not your tool. If you are trained as a forensic DNA analyst, you can examine the semen stain from the perspective of the relevant question which, in our example was not "whose is it" but rather "how did it get there?" If you lack the knowledge and skills to answer the question, you have at least identified and preserved the evidence for someone who is capable of answering the relevant question. A common paradigm allows for this.

It is time to see the generalist/specialist debate as distracting and divisive. The relevant issue facing forensic science is deciding on the basic principles that underlie all examinations of physical evidence, and teaching these principles in an organized and overt manner to all criminalists regardless of the type of evidence that they examine. This will prepare them to apply the proper logic, scientific principles, and advanced technical skills required to effectively process any evidence presented to them.

Having agreed that the bartender was indeed an expert at his specialty, and grateful for the inspiration provided by Mr. Houck for the day's topic, we adjourned to codify these proceedings of lunch.

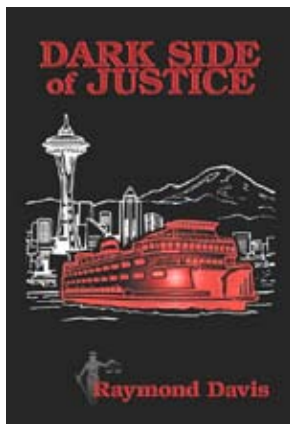
References

1. Houck Max M., Review of: Principles and Practice of Criminalistics, J. Forensic Sci. 46 (5), 1263-1264, 2001
2. Inman, Keith and Rudin, Norah, Principles and Practice of Criminalistics: The Profession of Forensic Science, CRC Press, 2001.

Head to Head



"I've been to every place described in the book. Most of the events in the book are true. Most of the names belong to someone I know, making it easier to paint a picture of them for the reader. I also knew that *CSI* is hot and that the public is fascinated by it. So, I used my crime lab experience to help move the story along."



Long-time CAC member and Past President Raymond Davis sat down with Keith Inman for a conversation about the creative process that went into Raymond's new novel, "Dark Side of Justice."

KEITH: Let's get right to it. Why did you decide to write a novel?

RAYMOND: That spark began my senior year in high school. I had an English teacher who taught creative writing and encouraged me to express myself more eloquently. Her appreciation was inspiring. I was hooked.

KEITH: How so?

RAYMOND: She gave out eclectic assignments; one of them was to write about "your favorite sound." My paper so impressed her that she posted it for the entire class to read. My first brush at fame.

KEITH: I know you've written dozens of articles for the *CACNews* and other publications. Did that help in any way with writing a novel?

RAYMOND: In a limited way, but still very helpful. It's important to have people read and review your work in order to craft your writing.

KEITH: So when did the bug first bite you to start this work?

RAYMOND: I began to work on it seriously in early 2007.

KEITH: Lord have mercy! Five years?

RAYMOND: It wasn't as easy as I thought it would be. I got great comfort from a book Johnny Cash wrote called, "The Man in White by The Man in Black." It took him 20 years to write it. I highly recommend the book. I decided not to rush it considering how much I needed to learn.

KEITH: The artist Miro tells a similar story. One of his paintings consisted of a single line meandering across an otherwise blank canvas. When a friend asked him how long it took Miro to complete this painting, he responded, "It took me 45 minutes to draw the line, and 30 years to know where to draw it."

RAYMOND: There's a quote from Blaise Pascal that's right on point, "The last thing one knows in constructing a work is what to put first."

KEITH: Perfect. Tells us, how did you begin? I mean, you just don't start writing, do you?

RAYMOND: Actually, no, I didn't. I recalled a line from Mark Twain when he was asked how one should start writing a book. His answer, "Write what you know, or write about yourself." I thought about my career and some of the interesting cases in which I've been involved, as well as my

extensive travels around the globe. I thought that perhaps I could put something together that would hold a reader's interest.

KEITH: How, then, did you start?

RAYMOND: I wrote a 20 page outline of the novel. My story boarding. That provided direction and momentum.

KEITH: With so many literary genres, how did you choose one?

RAYMOND: That was the first decision I had to make. I knew I didn't want to write non-fiction. Way too much effort. All that research, confirming facts, etc. You should know given the books you've written. So fiction was my best course. Next, I thought about what I like to read—mysteries and thrillers. That was it!

KEITH: Did you seek out any training along the way?

RAYMOND: I joined a writer's group and the material they were sharing was so horrible it was a struggle not to shake my head in disbelief. It was awful. Then, the thought struck me, perhaps my stuff is just as bad. That concerned me enough to find a group of people over the years to review my novel and provide specific feedback. Also, I was given a book by Dianne Burns, Stephen King's "On Writing," which I found tremendously helpful. I followed most of his advice, the most important of which is to read other authors.

KEITH: So whom did you read?

RAYMOND: I decided to read both fiction and non-fiction books, in about a 3:1 ratio. Stephen King advises to read beyond the words and look at structure, how they develop the back story, and how to develop the main characters without overdeveloping peripheral characters. In addition, he urged the budding author to look at style; how did the writer use language to create a flow that holds the reader in rapt attention. Dialogue was also another critical element.

KEITH: That sounds like as much work as the research you *didn't* want to do for the non-fiction category! How many books did you end up reading?

RAYMOND: Beginning the first of January 2007, I kept a log of all the books I read, marked them as fiction or non-fiction and whether I would recommend the book. To date, I have read 225 books.

KEITH: As you said, you chose mysteries. But not all mysteries are the same. How did you decide what style to adopt?

Forensics Source is the one-stop shop for thousands of quality products, supplies and equipment for the forensics professional. From ABFO Scales to Zephyr Brushes, ForensicsSource.com provides customers with quick and easy access to the crime scene, crime lab and educational products needed to succeed in today's challenging environments.

EVI-PAQ®**nik®**
PUBLIC SAFETY**iDenticator****projectina®**©2010Safariland - 022210-CAC/IAI

RAYMOND: That was another tough one. I knew that I would have to find a style or I'd be totally lost. I came across a book by John Grisham called, "The Painted House." It was written as a narrative in the first person. I liked that because I wouldn't have to worry about jumping back and forth between speakers, or back and forth in time. It would give me the opportunity to just write a novel in a way similar to telling a story. And you know how I love telling a story!

KEITH: How would you rate the quality of your early manuscripts?

RAYMOND: Not very good. I got disappointed early on by worrying about all the elements of writing.

KEITH: Yet that self criticism is the harbinger of hope, I think. An uncritical mind accepts everything at face value, and fails to improve the craft of writing. What was your assessment of that early work, and what kept you going in spite of the disappointment?

RAYMOND: Well, writing short articles is nothing compared to writing a novel. I fell into a trap most first time writers encounter: Falling in love with their own words. The most helpful advice I received was from John Houde, a member of my group, who told me, "You need to let the air out." I was over writing.

KEITH: Can you give us an example?

RAYMOND: "The suspect obviously needed to hide the evidence. That evidence had to be hidden in such a manner that it couldn't be found. Because, if the authorities did in fact discover the incriminating item they'd soon learn his identity forcing him to hide the evidence." I let the air out by just writing, "The suspect knew they'd learn his identity if he didn't hide the evidence." One sentence, thirteen words compared to 45 words. It says the same thing without belaboring the point. I was told by another published author, "Don't insult the reader by explaining everything in crushing detail. If they don't get it, fine. But, don't insult those that do." My first manuscript ran 740 pages. The final manuscript came in at 424.

KEITH: That's a big difference.

RAYMOND: Particularly for the reader! My own reading led me to discover how authors managed to say more with less. The one author who stands out is Elmore Leonard. His writing is so sparse that if you're not paying attention you can get lost quickly. I believe that's where the art of writing lies.

KEITH: How did you find a publisher? I've heard it's pretty difficult.

RAYMOND: That's one of the main reasons why it's taken so long to get my novel published. There were no publishing firms in Idaho and most publishing houses require an agent to present the writer's novel. I couldn't find an agent, but I did manage to find a publishing house in Minnesota who agreed to read my novel. After a month, I received a positive rejection letter.

KEITH: Hmm, that doesn't sound particularly positive to me.

RAYMOND: It was, in the sense that they provided specific feedback. They told me that if I made the adjustments/changes they were recommending they'd consider publishing it. I agreed to make some changes but the one they emphasized the most, I wouldn't do. So, I put the book on the shelf for a year.

KEITH: What happened next?

RAYMOND: A new publishing firm opened in Boise,

Borderline Publishing, in July 2011. I liked the fact that they were local, not requiring me to travel to the publishing firm. I had a friend who had to travel back East six times to meet with his publishers and it cost him a small fortune. I wanted to avoid that.

KEITH: What did they do with it?

RAYMOND: My novel was given to one of their editors who read 3-4 selected chapters. The editor informed the director that the novel was publishable. I signed a contract and then had the novel edited. When I got it back for my review it had a lot of blue ink splashed all over it. I was shocked by my poor grammatical skills. She told me not to worry, that most authors aren't very good at grammar, and just to concentrate on the story.

KEITH: How many people were in your group of reviewers?

RAYMOND: Twelve. I gave each an acknowledgment in my novel. One of my biggest supporters was my wife. I read each chapter to her, watching her facial expressions as I proceeded. She helped me when I used Swedish terms incorrectly, and also assisted in highlighting Swedish culture. In the final analysis, I am happy with the help I received. The most important aspect of writing is getting feedback. I had to avoid gushing feedback because it didn't help me. Another reviewer, Richard Konieczka, my co-instructor in the courtroom course, told me to stop being repetitive. I told him that was the scientist in me, wanting to make sure everything was said in duplicate. His advice, "Say it once, move on."

KEITH: Tell us briefly about the novel, "Dark Side of Justice."

RAYMOND: This story is based on true events. I have taken some creative license in melding some facts together. The protagonist in the story, Carl Bowman, is not me. That person is taller, slimmer and younger. Having said that, his story mirrors mine.

KEITH: So you used Twain's advice to write about yourself, or what you know?

RAYMOND: Yes. I've been to every place described in the book. Most of the events in the book are true. Most of the names belong to someone I know, making it easier to paint a picture of them for the reader. I also knew that CSI: is hot and that the public is fascinated by it. So, I used my crime lab experience to help move the story along. It also helped not having to dream up people. One character, Martin Holmes, was drawn from my brother Ron, who was a field supervisor for the DEA, and is an avid weightlifter.

KEITH: So you took events in your personal life as well as your career to create this story. Is it that simple?

RAYMOND: In a word, yes. What's difficult is telling the story that holds the reader's attention. To paraphrase, "The most memorable character ever written in fiction pales in comparison to the drabest person who ever lived." Creating characters is tough compared to writing about real people. I suspect that's why the 'true crime' genre is so compelling. It's about real people and real events.

KEITH: Back to the book. Does it just tell a story, or does it also make a "Raymond Davis" point?

RAYMOND: It's a story about the search for justice and

cont'd on pg. 17

This one-day workshop will provide an introduction to several steps of the Shooting Incident Reconstruction process. The topics presented will be illustrated with lecture, hands-on practical exercises, and live-fire demonstrations of ballistic phenomena. *Topics:* Examination, recognition and interpretation of suspect bullet impacts; interpretation of bullet paths by probe and string method; zones of shooter possibility; brief overview of basic bullet versus target interaction and resultant phenomena (deflection, penetration, perforation).



Chris Coleman and Bruce Moran (r) reconstructing.

TEAM BUILDING / LEADERSHIP: Also slated for Tuesday, the lucky 100 registrants will be treated to a presentation by John Rodriguez, consulting partner with The Table Group, a Patrick Lencioni Company and Javier Lozano, human resource manager, Aera Energy. Tammi Noe chairs, The Table Group is a firm dedicated to helping organizations and their employees operate more successfully by improving teamwork, morale, and performance. John Rodriguez has worked with a wide variety of teams across multiple industries, from large, established firms to start-ups; seasoned executives to newly formed teams. This workshop will cover the dysfunctions outlined in Patrick Lencioni's New York Times best-seller "The Five Dysfunctions of a Team and How to Overcome Them." A brief overview of the Death by Meeting model will also be presented providing attendees with a new perspective on the structure and purpose of meetings. Javier Lozano will discuss "Valuing & Managing Workforce Diversity." Changing workforce and population demographics are creating a demand for managers who can work effectively in this change.



Peter Barnett and Raymond Davis (below) looking ethical.



ETHICS AND THE PROFESSION OF FORENSIC SCIENCE: Only 40 fortunate attendees will get to participate in Raymond Davis (Court Skills) and Peter Barnett's (Forensic Science Assoc.) half-day workshop. Greg Laskowski chairs. The class will cover ethical issues relevant to the field of forensic science and includes practical discussion and class participation on courtroom testimony case examples.

TRUEALLELE® WORKSHOP (DNA EXPERT SYSTEM SOFTWARE): Fifty folks will spend the entire day with Instructor Dr. Mark Perlin, Founder, Cybergenetics and creator of TrueAllele®. Dr. Kevin W.P. Miller, Lab Director, Kern Regional Crime Laboratory will be your chairperson. This workshop introduces probabilistic genotyping (SWGAM paragraph 3.2.2) through TrueAllele® interpretation of DNA mixture evidence. The student will survey the forensic process, from data through match. Topics include genotype uncertainty, mixture weight and likelihood ratios. On their own computer, a student will use TrueAllele® software to visually explore mixture data and case examples. This workshop will require attendees to preview an online lecture prior to the workshop.

FORENSIC BODY FLUID IDENTIFICATION TECHNIQUES: Presented by Independent Forensics, this afternoon-only will offer the first 20 registrants hands-on experience in the identification of blood, semen, saliva, urine and sperm for forensic DNA analysts. Karl Reich, Ph.D. and Dina Mattes, who are both from Independent Forensics, will lead the way along with Supv. Crim Brenda Smith (Kern Co), chair.

This vendor workshop's emphasis will be on developing forensic laboratory-specific solutions for real world forensic samples and laboratory work flow. Current and state-of-the-art methods including lateral flow immunochromatographic strip tests and immunofluorescent staining will be demonstrated, discussed and where possible illustrated with hands-on examples.



Ethical Dilemmas

DISCUSSION CORNER WITH CAROLYN GANNETT

FULFILLING WORK REQUESTS

The Scenario

You receive a written request for “Bloodstain pattern analysis on Item #55,” which turns out to be a left shoe, reportedly from someone named Joe Bloe. You know nothing about the case, and names other than Mr. Bloe’s are listed as suspect and victim. So, you call the requesting attorney in order to gain insight into the question being posed, obtain relevant case information, and determine how the shoe ties in to the case. She refuses to provide any information, stating that doing so might bias your analysis, but emphasizes that she needs the analysis done right away for court. Your lab is terribly backlogged and you could bang out this quick single-item bloodstain pattern analysis in less time than it would take you to go through various channels to obtain the case information you need.

How would you proceed?

Discussion

One of my pet peeves is bloodstain pattern analysts who blindly analyze what is listed on the request form. When I’ve come across such instances and protested, I’ve received responses like, “This is all I was asked to do,” or, “I don’t have the time to create more work for myself,” or, as in this scenario, “It’s easier to just do what’s requested and move on.” Based on what I’ve gleaned from reading ethics documents, I believe it is the analyst’s ethical responsibility to determine what question is being asked, evaluate whether it is an appropriate question given the facts of the case, and to advise the requester regarding modifying the question or adding questions (including analyzing additional items) both initially and as more information is gleaned from the bloodstain pattern analysis.

In a survey of three dozen forensic science ethics documents, four were found to state something about ensuring that all probative exhibits in a case receive appropriate technical analysis. They are quoted below*:

ABC Rule 4: Ensure that all probative exhibits in a case receive appropriate technical analysis.

CIS CEC3: ensure that all items receive appropriate technical analysis;

CSFS 6: take reasonable steps to ensure that all items in a case receive appropriate technical analysis;

IABPA 4 par. 3: Members should take responsibility for determining the most appropriate protocols for doing their own examinations or analyses. This determination should not be left to those requesting the work, such as clients, attorneys, or investigators.

IABPA 4 par. 4 & 4.2.6: A member working a case shall take all reasonable steps to encourage that appropriate examinations and analyses are requested for the probative evidentiary items in that case.

There is no way to determine whether the analysis is appropriate without knowing what question the requester is attempting to answer and the case facts surrounding that question. Once the question is known, “appropriate technical analysis” may mean not performing the analysis at all, or it may mean analyzing additional items. If, as in this scenario, the requester refuses to provide the question and related background information, the analyst may be left unable to “ensure that all [probative exhibits/items in a case] receive appropriate technical analysis” (ABC and CIS). Strictly speaking, the requester’s refusal to provide this information forces the analyst to violate ABC and CIS ethics. More realistic wording for ethics documents may be found in CSFS’s and IABPA’s documents, which make the analyst responsible only for taking “reasonable steps to ensure” appropriate analyses—a less strict requirement than being responsible for actually ensuring appropriate analyses.

Another concept that applies to this scenario is the analyst’s duty to serve justice—not to serve the requester, not to serve the backlog, but to serve justice. The following emphases are my own:

AFTE Introduction, paragraph 2: It is the duty of any person practicing the profession of firearms and toolmark examination to serve the interests of justice to the best of their ability at all times.

ASQDE IX.i: ...maintain a constant spirit of fairness, combined with high ethical, educational, and technical standards, thereby promoting justice and creating increased confidence in the profession of document examination;

CAC Preamble, paragraph 2: It is the duty of any person practicing the profession of criminalistics to serve the interests of justice to the best of his ability at all times.

ENFSI 2.3: Recognize that your overriding duty is to justice.

FSReg 1: Your overriding duty is to the court and to the administration of justice.

IABPA Preamble: Because a member’s conduct is a reflection on the Association and the profession, members have a responsibility to...the justice system...to conduct themselves in an appropriate manner.

NWAFS Preamble, paragraph 2: It is the duty of any person practicing the profession of forensic science to serve the interests of justice to the best of their ability at all times.

SCAFO: I dedicate myself to the efficient and scientific administration thereof in the interest of Justice...

These associations might argue that it doesn’t matter what the requesting attorney asserts with respect to not revealing background information, because the analyst is not serving the requester. The analyst is serving justice. As such, the analyst must have this information in order to use his or her expertise to determine the best way to serve justice. Furthermore, if the analyst really is serving justice, bias will not be a factor in the results, and the requesting attorney need not

Share your thoughts and dilemmas at
www.ethicsforum.cacnews.org

be concerned with trying to help the analyst be unbiased by withholding information.

The reasons listed above are factors to consider when tempted to do the analysis without background information, as in this scenario, where it seems easier to just bang out the analysis than to pursue obtaining background information. But another consideration would be the testimony that could result from doing an analysis without background information. The following are hypothetical exchanges.

Q: "Why didn't you analyze this, that, or the other?"

A1: "Nobody asked me to."

A2: "I didn't know about them."

Versus:

A3: "Because, based on my knowledge of the case and my training, knowledge, and experience, I determined that doing so would not provide answers to any probative questions."

Granted, there may be times when any of these answers are fully warranted and ethically sound, but, sometimes not. Depending on the context, A1 can make an analyst sound like some lackey who waits to be told what to do and doesn't do anything more than what's asked of him or her. This probably does not instill confidence with the court and, thus, might not serve justice well. A2 can make analysts sound like they don't know what they are doing, or haven't considered all the facts at hand. This might not serve justice well, either.

Q: "You analyzed the pants for spatter stains and reported on them. Yet, there were several circular transfer patterns of similar diameter on the pocket lining, and the diameter was similar to that of a pipe that was used in the assault. Did you analyze these patterns, and why or why not?"

A1: "No, because I was only asked to analyze for spatter stains. But, I did document the circular transfer patterns in my notes."

A2: "No, because I was only asked to analyze for spatter stains, so that is all that I paid attention to."

Versus:

A3: "Yes, because my understanding of the facts of the case was that a pipe of similar diameter was involved in the assault."

It could be argued that A1 and A2 violate the concept of ensuring that all probative exhibits receive appropriate analyses. Based on this concept, perhaps the analyst should have been aware that the facts of the case included a pipe, should have mentally made the connection between the patterns and the pipe, and should have investigated the possibility of the pipe having created them. A2 may be a more severe instance of violating the concept. Focusing only on the initial question posed could lead to overlooking valuable information that would require further appropriate technical analysis. A3, on the other hand, indicates knowledge of the facts of the case, which allowed the analyst to ensure additional appropriate technical analysis after finding new information during the analysis.

Next time you receive a request for bloodstain pattern analysis, I hope you will keep the content of these ethics documents in mind. Doing so may encourage you to become armed with the facts of the case prior to your analysis. The facts can help you determine whether the requested analysis is appropriate and bring to light other appropriate analyses not yet considered. Also, the facts can help enable you to identify potentially probative evidence during your analysis, whether it's bloodstain patterns or evidence of another nature. Even if you do not answer to any of the codes mentioned above, conforming to them can not only improve your service to justice, but also help you avoid uncomfortable testimony like, "Because nobody asked me to" or "Because I didn't know about them."

*Acronyms:

ABC	American Board of Criminalistics
AFTE	Association of Firearm and Tool Mark Examiners
ASQDE	American Society of Questioned Document Examiners
CAC	California Association of Criminalists
CIS	Canadian Identification Society
CSFS	Canadian Society of Forensic Sciences
ENFSI	European Network of Forensic Science Institutes
FSReg	Office of the Regulator, Home Office, UK
IABPA	Int'l Association of Bloodstain Pattern Analysts
NWAFS	Northwest Association of Forensic Scientists
SCAFO	Southern California Association of Fingerprint Officers

Have an ethical dilemma you'd like evaluated?

Submit a sanitized version to
GannettForensics@aol.com

Head to Head *cont'd*

ultimately, finding what's truly important in life. At the end of the day, it isn't about money or position that brings us the greatest joy in life, but rather what we hold to be most important to us. I found it satisfying through the protagonist's struggle.

KEITH: Did you ever confuse your own identity with that of the main character?

RAYMOND: There were numerous occasions when I found myself identifying with the main character, which, of course, caused me to veer off course into subplots that hindered the flow of the story. A metaphorical scalpel becomes, at that point, a writer's best friend.

KEITH: Will there be a sequel or another novel soon?

RAYMOND: Yes, a sequel. It's called "Parabellum." Again, it's based on true events with the return of Carl Bowman. I have two more following that, for a four part set. Wish me luck.

KEITH: Indeed, good luck, my friend. Any last words for our readers?

RAYMOND: If you've given any thought to writing, do it now. Get Stephen King's book, "On Writing," join a writer's group, or take a creative writing class. There are many interesting stories that have yet to be told, whether it's based on

your work or something from your private life. I have heard numerous case studies presented at forensic symposia that could easily be turned into novels. If you think you have a story to tell, write a synopsis of your story, find people to review it, and see where it leads you.



Raymond with Keith Inman (left)

2012-2013 CAC Board of Directors Candidate's Statements



For CAC President Elect *Eric Halsing*

I am a Senior Criminalist at the California DOJ Jan Bashinski DNA laboratory. I began my career there in 2001 working in the Offender Data Bank Unit. In 2005 I was transferred to the criminal casework DNA unit. I have been a member of the CAC since 2003 and in that time I have attended several seminars (giving presentations at two of them) and many study

group meetings. I have served on the Ethics, Merchandise, and Training & Resources Committees. Since mid-2008 I have been co-webmaster for the CAC website and I am currently the Treasurer's Assistant. I am also a member of the Criminalistics section of AAFS. I would be very honored to continue to serve the CAC as President-Elect and would appreciate your vote.

For Regional Director North *Meghan Mannion Gray*

I first joined the CAC as a student member in 2001 while working as a student assistant at the California DOJ laboratory in Berkeley. In 2002 I began working full time in the offender databank program and three years later I transitioned to the DNA casework section. I have served as the Regional Director North for the past

two years, and have enjoyed organizing lunches and study groups for the members in the northern region. I have had the opportunity to work with a great group on the board and have always made an effort to contribute in a positive manner to the board meetings. It has been a fun, educational experience and I would appreciate another opportunity to serve the CAC as Regional Director North. Thank you for your consideration.



For Recording Secretary *Kirsten Fraser*

I have been a criminalist with the Los Angeles County Sheriff's Department Scientific Services Bureau since September 2007, and a member of the CAC since May 2008. In 2011, I had the opportunity to co-chair the CAC Spring 2011 Seminar, held aboard the Queen Mary in Long Beach.

Attending CAC Seminars and study groups has allowed me to gain invaluable knowledge pertaining both to my specific forensic discipline and to areas outside of my field. Additionally, my experience planning the Spring 2011 Seminar provided me the chance to show my professional commitment and to test my creative and organizational skills while working closely with peers and colleagues. It is due to the knowledge I have gained from my involvement with the CAC and to the incredible group of forensic professionals that I have worked with, that I would like to become more involved with the organization.

I have the utmost respect for CAC as a professional body and would be honored to serve as Recording Secretary.

For Membership Secretary *Michelle Halsing*

I am a Senior Criminalist with the California DOJ's Missing Persons DNA Program. I have been with DOJ since I entered this field in 2001 working in the offender Data Bank program. I joined the CAC in 2003 and, since that time, I have attended many seminars and Study Group meetings. In 2007, I served as the General Session Program Coordinator when our laboratory hosted the Fall

seminar in Berkeley. When I became Chair of the Merchandise Committee over 6 years ago, I oversaw the successful creation of an online store-front to boost sales. In 2010, I became Membership Secretary and, in that role, we have made the transition from paper membership records to digital ones, including the implementation of the Member Services website. Being on the Board of Directors has been a great experience and I would be very honored to continue to serve the CAC in that capacity!



**CALIFORNIA ASSOCIATION OF CRIMINALISTS
B O A R D O F D I R E C T O R S**

President:
Kevin Andera



Orange County Sheriff-Coroner
320 N. Flower St.
Santa Ana, CA 92703
(714) 834-4510
president@cacnews.org

President-Elect:
Todd Weller



Oakland PD Crime Lab
455 7th Street, Rm 608
Oakland, CA 94607
(510) 238-3386
president-elect@cacnews.org

Recording Secretary:
Jamie Miller



Orange County Sheriff-Coroner
320 N. Flower St.
Santa Ana, CA 92703
(714) 834-4510
recordingsecretary@cacnews.org

Treasurer:
Laura Silva



Oakland PD Crime Lab
455 7th Street, Rm 608
Oakland, CA 94607
(510) 238-3386
treasurer@cacnews.org

Regional Director: (North)
Meghan Mannion-Gray



CA DOJ Jan Bashinski Lab
1001 W. Cutting Blvd, Ste 110
Richmond, CA 94804
(510) 620-3300
northregion@cacnews.org

Regional Director: (South)
Mey Tann



CA DOJ Riverside
7425 Mission Blvd.
Riverside, CA 92509
(951) 361-5000
southregion@cacnews.org

Membership Secretary:
Michelle Halsing



CA DOJ Jan Bashinski Lab
1001 W. Cutting Blvd, Ste 110
Richmond, CA 94804
(510) 620-3300
membership@cacnews.org

Editorial Secretary:
Gregory Matheson

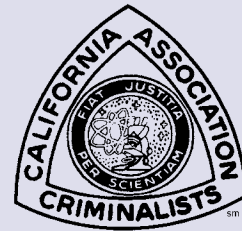


4219 Jasmine Ave
Culver City, CA 90232
gregmatheson@fslresources.com

Immediate Past President:
Adam Dutra



San Diego PD Crime Lab
1401 Broadway, MS 725
San Diego, CA 92101
(619) 515-2793
past-president@cacnews.org



The "CAC logo" is a registered service mark of the CAC and its use is restricted to official communications and by other authorization of the CAC Board.

interested in
becoming a
member?

Visit us online at
www.cacnews.org

CAC QR Codes

Quick Response codes work with your smartphone to save time and typing. Point your phone's camera and visit the CAC!



CACNews.org
Website



CAC Store

Follow the Trail...

CALIFORNIA ASSOCIATION OF CRIMINALISTS

Spring 2012 Seminar

May 7-11, 2012

Bakersfield

Double Tree Hotel

3100 Camino Del Rio Court

Bakersfield, CA 93308



**Hosted by the Kern County Regional
Criminalistics Laboratory**

