WI Department of Justice

Volume 2, Issue 3
Oct 23, 2015

Crime Laboratory Bureau

DIVISION OF LAW ENFORCEMENT SERVICES

Bureau Technical Bulletin

Third Quarter 2015

INSIDE THIS ISSUE:

New Employees	2
Updates	3
Quality Corner	4
OSAC-QIC	5
Heroin Update	6
DNA	7
Databank	8
Employee Recognition	9
Odds 'N Ends	10

The mission of the Wisconsin State Crime Laboratory Bureau is to provide quality forensic analyses in the interest of criminal justice, performed in a timely manner, communicated in a clear and unbiased fashion, and to complement that with nonbiased, effective, and competent expert testimony for the trier of fact.

OUTSTANDING MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS AWARD

Congratulations to Sandy Koresch, our Controlled Substances Bureau Technical Unit Leader. Sandy Koresch was the recipient of the "Outstanding Midwestern Association of Forensic Scientists (MAFS)" Award this year. The award is given to individuals with more than five years of experience that have significantly contributed to the MAFS organization or the forensic science field and whose actions have resulted in marked improvement in the quality, recognition, or acceptance of MAFS or the forensic science field. Sandy has been a MAFS member for 20 years during which time she has presented papers and posters at MAFS meetings, served as the MAFS Chemistry Section Coordinator and served on numerous MAFS committees. She is also a past Board Member and a fall meeting planner for the MAFS 2012 meeting.

Sandy has been with the CLB for almost 25 years. Splendid Success Sandy!

Last newsletter we recognized Casey Collins for his accomplishment in receiving the Forensic Scientist of the Year Award from Attorney General Brad Schimel.

We would like to thank all who participated in the nomination process giving recognition to the additional nominees:

Gretchen Degroot
Jen Honkanen
Aaron Matson
Jeff Zwickey

Congratulations to everyone and thanks for all the great work you do!

New Employees

Please join in welcoming the new staff to the CLB!

Jace Klimeck
Identification-Wausau

[redacted]

Kayla Rang
DNA-Milwaukee

[redacted]

Jessica Koenig
DNA-Milwaukee

[redacted]

Amy Sasman
Toxicology-Milwaukee

[redacted]

Cullen Eberhardy
Controlled Substances-Milwaukee

[redacted]

Meghann McMahon
Controlled Substances-Milwaukee

[redacted]

"I don't know what your destiny will be, but one thing I know: the only ones among you who will be happy are those who will have sought and found to serve."
Albert Schweitzer

Congratulations Betty Ventura!
She moved from a limited term employee to a full time Office Associate in the Wausau lab

[redacted]

CURRENT RECRUITMENTS

We are working through a lot of recruitments within the CLB. Here is a status update:

Laboratory Quality Managers: Two positions (Madison & Milwaukee) - pending
Firearms Examiner: One position Milwaukee-Pending
Forensic Imaging Specialist-Two positions in Wausau-pending
Forensic Program Technician: One position Madison-pending

2015 EVIDENCE TECHNICIAN SHOOLS

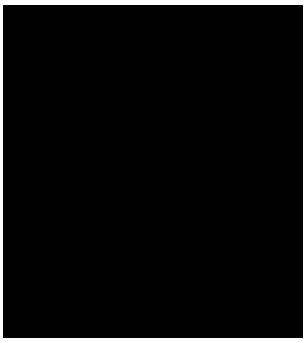
All 2015 schools are completed. We are working out next year's schedule.

3rd Quarter Crime Scene Response Call Outs

This quarter was another busy one for the individuals who volunteer for the Crime Scene Response Unit. Here are the 3rd quarter response call-outs:

7/13/2015 Milwaukee PD/Whitefish Bay PD- Officer Involved Shooting (OIS)-Non-fatal
7/16/2015 Milwaukee PD- (OIS)-Fatal
7/22/2015 Door County SO-Suspicious Death
7/22/2015 DCI Madison-OIS-Fatal
7/22/2015 Monroe PD-Homicide-shooting
8/05/2015 Greenfield PD-OIS-Fatal
8/18/2015 Wood County SO-Homicide
8/22/2015 DCI-Wausau-OIS-Non fatal
9/01/2015 Adams County SO-Homicide & autopsy
9/02/2015 New Richmond PD-Double Homicide-arson
9/09/2015 Waukesha PD-Homicide
9/24/2015 Cudahy PD-Homicide-burnt vehicle

QUALITY CORNER WITH CASEY COLLINS



Casey Collins

Hello Quality Staff,

This QAC corner comes from the 2015 Association of Forensic Quality Assurance Managers (AFQAM) conference. Beyond the usual QA stuff like accreditation standards, proficiency testing and getting people to change ☺ – there was an emphasis on the human aspects of our work. We had presentations on thinking out the box (aren't QMs all about the box?) and workshops on Curiosity verses Judgment (I need to watch Brain Games more). A psychologist gave a presentation on Forensic Fraud (his book title) analyzing an unnerving number of "simulators", "dissemblers" and "pseudo-experts". An investigator presented a case study of the dysfunctional Massachusetts's drug laboratory where drug chemist Annie Dookhan worked.

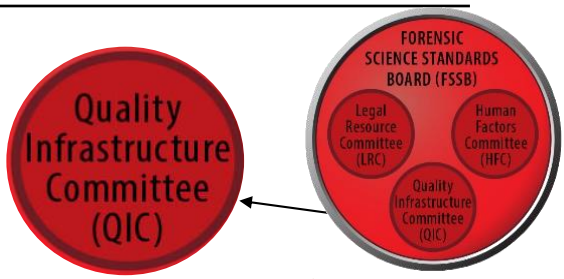
"Good tactics can save even the worst strategy. Bad tactics will destroy even the best strategy."
George S. Patton

The last presentation was on "cognitive bias" which affects us all. Cognitive bias is most likely to affect our decisions when: there is ambiguity (low data quality, low signal/noise), there are limited established criteria to follow, there are multiple stressors (family crises, time pressure, high profile cases), the judgment process is complex and/or when there are weak consequences for being wrong. The presenter then discussed the cognitive "blind spot" - our natural *inability* to recognize our own biases. We tend to judge ourselves by our intentions and others by their actions. Lastly, humans have two systems of thinking. System 1 is fast thinking and system 2 is…slow thinking. Fast thinking is automatic, stereotypic and emotional. Slow thinking makes multi-faceted comparisons, is conscious, effortful, and deliberate. Both systems have situational advantages.

In our get-it-done world, please continue to cultivate your deliberate, inner scientist. Thanks!

NIST-OSAC

Quality Infrastructure Committee



The Quality Infrastructure Committee was established to assemble and update a Forensic Science Code of Practice, provide guidance on quality issues, and provide impact statements that inform agency management about how specific standards may affect laboratory operations. On an as needed basis, it will work with outside standards development organizations and accrediting bodies.

"The quality of life is determined by its activities."

Aristotle

Committee Members

- Karen Reczek, Senior Standards Information Specialist, NIST Standards Coordination Office, Committee Chair
- Karin Athanas, Program Manager, American Association For Laboratory Accreditation
- Sally S. Aiken, Medical Examiner, Spokane County, Washington
- Barbara E. Andree, Forensic Chemist, Bureau of Alcohol, Tobacco, Firearms and Explosives
- Jason Bond, Quality Assurance Coordinator, Indiana State Police Laboratory Division
- Pamela L. Bordner, Sr. Accreditation Program Manager, ASCLD/LAB
- Kris Cano, Forensic Laboratory Manager, Scottsdale Police Department Crime Laboratory
- Matthew Gamette, Laboratory Improvement and Quality Manager, Idaho State Police Forensic Services
- Keith Greenaway, Vice President, ANSI-ASQ National Accreditation Board
- Arlene Hall, Commander, Illinois State Police, Division of Forensic Services
- Bruce Houlihan, Director, Orange County Crime Laboratory/Orange County Sheriff-Coroner
- Alice R. Isenberg, Ph.D., Section Chief, FBI Laboratory
- Timothy Kupferschmid, Laboratory Director, New York City Office of Chief Medical Examiner
- Frances E. Schrotter, Sr. Vice President and Chief Operation Officer, American National Standards Institute

Right: Norman, Oklahoma, January 2015 – Members and invited guests at their first OSAC meeting.
Credit: NIST

Heroin Use on the Rise Among Women, Wealthier People, CDC Finds

The face of heroin addiction in the United States is changing, as well-off abusers of prescription painkillers switch to illicit narcotics to feed their habit, federal officials reported.

Heroin use increased 63 percent over the past decade. From 2002 to 2004, the annual rate of heroin use was 1.6 per 1,000 persons aged 12 or older. By 2011 to 2013, that rate was 2.6 per 1,000 people, officials from the U.S. Centers for Disease Control and Prevention said.

Correspondingly, there has been a rapid increase in heroin overdose deaths. The number of heroin overdose deaths nearly doubled between 2011 and 2013, and in 2013 more than 8,200 people died from the narcotic. Overdoses have nearly quadrupled since 2002, the officials said.

The biggest increases in heroin use in recent years were found in groups that typically aren't expected to go near the drug, including women, people with private insurance and higher-income individuals, the report said.

This expansion of heroin abuse can be largely chalked up to an earlier wave of prescription opioid drug abuse -- including such drugs as Vicodin, OxyContin and Percocet -- and government efforts to counter that trend, said Brad Lander, an addiction medicine specialist at the Ohio State University Wexner Medical Center.

The CDC's new report bears this out. About 45 percent of people who used heroin also were addicted to prescription narcotics from 2011 to 2013, researchers found. That's more than double the rate from 2002 to 2004, the report revealed.

Prescription drug abuse is "the strongest risk factor for heroin abuse or dependence," Frieden said, adding that prescription narcotics are "essentially the same chemical, with the same effect on the brain" as heroin.

People addicted to prescription painkillers are 40 times more likely to abuse heroin, according to the CDC's report. By comparison, cocaine users are 15 times more likely to use heroin and marijuana users are just three times more likely to use heroin, the CDC noted.

Nearly all people who reported heroin use also reported using at least one other drug in the past year, and nearly two-thirds had used at least three other drugs, the CDC reported.

The findings were published in the July 7 issue of the CDC's *Morbidity and Mortality Weekly Report*.

"After climbing a great hill, one only finds that there are many more hills to climb."

Nelson Mandela

DNA Case Analysis Unit Update

Gretchen DeGroot,
Bureau Technical Unit Lead

On September 17, 2015, the Bureau wide DNA Section held its annual joint meeting at the Milwaukee County Sheriff's Training Center in Franklin and included information from the DNA Analysis (Casework) and DNA Databank Units. The meeting started at 9 am and did not end until after 4 pm. There was a lot of information that was shared during this meeting and we still were not able to present all that we wished to share. As a result, it was decided to return to two DNA Section meetings a year in an attempt to keep the day shorter and share information in a timelier manner. During this meeting we had two guest speakers from outside the WSCLB, Milwaukee County ADA Sara Lewis, who has been assigned as the statewide DNA prosecutor and Laura Kollatz, the Sexual Assault Nurse Examiner Coordinator for Aurora in Milwaukee. Sara Lewis presented information to the staff on her plans for training state prosecutors and what to do when you are not allowed to take your case jacket to the stand with you. Laura Kollatz discussed what is involved in an SA examination and the AG-SART committee activities.

The DNA Analysis Unit has been very busy in the last quarter. We have assisted Promega Corporation in the validation of a new quantitation system (PowerQuant) . PowerQuant will provide, in one reaction, information about the amount of both human and male DNA. It will also provide data on the quality of the DNA by providing information on whether the sample is degraded or inhibited. Work performed by the DNA Section is being presented as a poster at the International Symposium on Human Identification (ISHI) meeting in Grapevine Texas, October 19-23, and a paper has been submitted to the *Forensic Science International: Genetics* for publication.

The next quarter promises to be even busier. We are validating an Excel based statistical calculator to provide statistics that better represent the weight of our conclusions (modified Random Match Probability (mRMP) calculator). We are also validating a new quantitation method that will provide more information in one reaction and provide a more precise value. Plans will be prepared for the validation of a new amplification kit that will include the expanded CODIS core loci (20 instead of 13) which must be completed by January 1, 2017. We have received grant monies to work the sexual assault kits that are currently in police storage. Although some of these cases will likely be outsourced many more will be worked in house. Added to all this we have new staff to train and additional staff to hire. DNA is continuing to grow and move forward with new methods and technology.

"Technology is the campfire around which we tell our stories."

Laurie Anderson

Databank Unit Update

Jen Honkanen,
Bureau Technical Unit Lead

It's now been six months since the new offender DNA collection law went into effect. As with all new laws, policies, and procedures there have been many ups and downs.

The upside is that our database size is increasing due in large part to the misdemeanor conviction samples we are processing. We are on pace to surpass last year's hit totals!

	Offender samples received	Offender profiles added to CODIS	Hits
2014	11,825	10,668	563
2015	16,636 (as of 10/08)	10,134# (as of 9/31)	393* (as of 8/31)
Total		193,467	5,967

#= 201 arrestee samples * = 3 hits were to arrestee samples

The not-so-upside of the new law is all the process changes. These changes have been exciting and have had a large impact.

1. To improve the quality of the database, the AFIS unit verifies the fingerprints and the FPTs verify qualifying offenses on all samples prior to DNA processing. A big THANK YOU goes out to the AFIS staff for verifying the offender fingerprints and the FPTs for verifying qualifying offenses!!!
   - As of 9/1, we have identified 1085 samples that did not have a qualifying event. These samples are being sent back to the collection agencies.

2. Due to errors during the collection process, more samples are being processed in-house rather than outsourcing to the vendor laboratory. Databank's direct amplification validation is nearing completion which will increase efficiency for in-house DNA processing.

3. The vendor laboratory is receiving offender batches more frequently. We send a batch every two weeks instead of once a month. Databank is starting validation of an expert software system which will decrease the time needed for data review.

4. State law requires probable cause to be determined prior to processing an arrestee sample. The intent was for the DNA Databank Unit to be automatically informed when probable cause occurs. This process is not fully functional so the FPTs are manually researching probable cause for arrestee samples which has delayed processing. There are about 4000 arrest samples awaiting probable cause.

5. Most conviction samples and arrestee samples collected with an arrest warrant will be outsourced to the vendor laboratory and entered into CODIS within three months. Problematic samples may take longer to process.
   - The Databank Unit does not have access to juvenile criminal history records so contact with juvenile authorities is made to verify arrest warrants. At this point, we are unable to determine probable cause on many of the juvenile arrest samples.
   - If a sample has collection problems, such as bad fingerprints or the individual does not have a state identification number (SID), the DNA processing may be delayed.

"We would never learn to be brave and patient if there were only joy in the world"

Helen Keller

EMPLOYEE RECOGNITION

The Employee Recognition Program is under way. It will allow us to internally recognize the great work and efforts of the team and individual achievements that occur within the CLB.

After discussion amongst the management team, it was decided that the program will take two forms. The Supervisors should be able to recognize employees on the spot. Each supervisor has been given poker chips with their Section's name on them. These poker chips will allow supervisors to "catch people doing something good" with immediate recognition. Individuals may be able to "trade up" for other items. Each lab manager will have discretion as to how they implement recognition within their labs.

We will still have a bi-annual bureau-wide recognition that the committee members will select out of the qualifying nominees. The recognition will come from the Division. We will start this program January 2016.

Nominees can come from anyone. Everyone is encouraged to step up and recognize the great work done by your peers, supervisors and management.

For more information, see the nomination form at the location listed below.

"Truth is what stands the test of experience"

Albert Einstein

Nomination Form location:

X:\private\dles\CLB Newsletters\Employee Award Nomination Form (version 1).docx

CLB Newsletter

To find previous versions of the CLB newsletter they are located on the X: drive under private/dles/CLB Newsletter

Odds & Ends

Organization of Scientific Area Committees for Forensic Science

OSAC Newsletter

Inside this issue

Feature Article:

OSAC Performs Outreach and Requests Feedback from Forensic Science Stakeholders

The Organization of Scientific Area Committees for Forensic Science (OSAC) program, and the forensic science community at large, has a wide-ranging and varied list of stakeholders; that includes the criminal justice system; forensic science service providers; accrediting bodies; certifying bodies; professional forensic science and other scientific organizations; international and national standards organizations; federal, state, and local government agencies that include thousands of state and local law enforcement agencies; academia; and the public.

To help strengthen the nation's use of forensic science and advance the professional practice, the OSAC is committed to effective communication and outreach with each of these stakeholders. The focus of OSAC outreach will be to 1) keep stakeholders apprised of program activities and to 2) collect feedback on those activities from all interested parties.

Recent OSAC conference outreach efforts include that are not limited to:

- The Bloodstain Pattern Analysis Subcommittee, the Friction Ridge Subcommittee, and Human Factors Committee representatives provided an update at the International Symposium on Forensic Science Error Management in July 2015
- OSAC Affairs, the Physics/Pattern SAC and Digital/Multimedia SAC provided public updates at the International Association for Identification's (IAI's) 100th International Education Conference in August 2015, including a Q&A session
- OSAC Affairs, the Physics/Pattern SAC, and the Chemistry SAC provided public updates at the National Institute of Justice's Impression/Pattern and Trace Evidence Symposium in August 2015
- NIST leadership provided an update to the National Commission on Forensic Science (NCFS) in August 2015

Upcoming OSAC conference outreach efforts include:

- The Facial Identification Subcommittee will provide updates at the Global Identity Summit in September 2015
- OSAC Affairs, and the Materials (Trace), Seized Drug, and Bloodstain/Pattern Subcommittees will provide updates at the Midwestern Association of Forensic Scientists Annual Meeting in September 2015

... Continued page 6

OSAC website: http://www.nist.gov/forensics/osac/

The Organization of Scientific Area Committees for Forensic Science (OSAC) has released its September 2015 monthly newsletter to communicate program status, activities, and opportunities for public input to both internal and external audiences.

If you would like to receive this monthly newsletter and be notified of upcoming public comment periods and other OSAC news, please visit the OSAC homepage at www.nist.gov/forensics/osac and insert your e-mail address in the brown box on the left side of the screen.

2015 MEETINGS:

AFQAM - October 6-9, 2015 Pensacola, FL
ISHI 26 – October 12-15, 2015 Grapevine, TX
SOFT- October 18-23, 2015 Atlanta, GA

Final Thought

"When you reach the end of your rope, tie a knot in it and hang on"

~ Thomas Jefferson