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The PROSECUTOR



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NDAA Capital Conference

January 23–24, 2018
Washington, DC

Prosecutors' Center of Excellence 11th National Best Practices Meeting

January 25, 2018
Washington, DC

Digital Prosecutor

February 19–22, 2018
San Antonio, TX



Human Sex Trade and Labor Trafficking

March 5–8, 2018
Miami, FL



Prosecutor 101: Boot Camp

March 12–15, 2018
Kansas City, MO

Prosecuting Homicide

March 26–29, 2018
Louisville, KY

To register or obtain additional information about a course, see our website: www.ndaa.org
National District Attorneys Association, Arlington, VA / 703.549.9222 / 703.836.3195 fax

**Stay Tuned for the Announcement of our 2nd, 3rd and 4th Quarter 2018 National Courses
in next month's *The Prosecutor*!!!**

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ABOUT THE COVER

The Art Deco styled Manhattan Criminal Courthouse at 100 Centre Street, New York was designed by Wiley Corbett and Charles B. Meyers. Construction began in 1938 and was completed in 1941. The site, formerly known as Collect Pond, had been the location of the old 1894 Criminal Courthouse and the old Tombs prison. It currently houses the Manhattan District Attorney's Office, the New York County Supreme Court, and other law enforcement agencies.

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VIEW

From the Hill

By Nelson O. Bunn, Jr.
NDAA Executive Director



NELSON O.
BUNN, JR.

CONGRESS SUCCESSFULLY PASSED a broad tax reform bill prior to recessing for the holidays, and kicked funding decisions for federal agencies into the new year for the start of the next session of this Congress. Very little else was accomplished leading up to the recess.

As always, NDAA members are encouraged to contact Nelson Bunn on any policy or legislative issues that arise. He can be reached at nbunn@ndaajustice.org or at 703-519-1666.

APPROPRIATIONS

- The government is currently funded through January 19, 2018 under a Continuing Resolution. The move was to allow them more time to resolve the funding of federal agencies as they spent the majority of their time focused on passing a massive overhaul of the nation's tax system.

ASSET FORFEITURE

- NDAA recently [signed a letter](#) urging the Senate to reject an appropriations amendment passed by the House that would prohibit the implementation of Attorney General Sessions' directive from earlier this year reinstating state forfeiture adoptions and strengthening training and reporting requirements for any seizures.

CYBER AND DIGITAL EVIDENCE ISSUES

- On December 11, the National Governors Association held a Cyber Crime Roundtable Policy Discussion in the Washington, DC area and invited NDAA to participate. Joyce King, an Assistant State's Attorney out of the Frederick County, MD State's Attorney's Office participated in the roundtable discussion on behalf of NDAA.
- On December 14, Route Fifty held a panel discussion entitled, "Beyond Gadgets : Public Safety in the Digital World". Bryan Porter, the Commonwealth's Attorney for Alexandria, VA, and member of NDAA's Legislative Committee, participated in the panel on behalf of NDAA. To watch the full discussion, visit <http://www.routefifty.com/feature/beyond-gadgets/#watch-now>.

DRUG POLICY

- NDAA continues to work with Congressional staff and a stakeholder working group to address potential gaps in dealing with the opioid crisis that were not addressed with the passage of the Comprehensive Addiction and Recovery Act (CARA). Congressional committees will revisit the overall opioid issue in 2018 as a second wave of efforts to tackle the issue.
- NDAA recently entered into an agreement with the Addiction Policy Forum to work nationwide to address the opioids crisis by enhancing and improving the criminal justice system response to substance use disorders. More information to follow as the project gets off the ground in 2018.

FORENSIC SCIENCE

- Recently, the House and Senate passed a reauthorization of the [Sexual Assault Forensic Evidence Reporting \(SAFER\) Act](#), which now goes to the President to be signed into law. The legislation reauthorizes grants through the Debbie Smith Act, which help to reduce the backlog of untested rape kits nationwide. NDAA was a strong supporter of the legislation and looks forward to its implementation.

HUMAN TRAFFICKING

- Last week, the House passed the Senate version of the [No Human Trafficking on Our Roads Act](#), legislation drafted and pushed for by NDAA. The legislation bans an individual's commercial driver license for life, with no possibility of reinstatement, when convicted of a felony involving a severe form of human trafficking while using a commercial motor vehicle. This makes it on par in federal statute with the penalties associated with a drug trafficking felony. It garnered bipartisan support in both chambers and now goes to the President's desk for signature into law.
- Congress also recently passed the [Combating Human Trafficking in Commercial Vehicles Act](#), which

requires the Department of Transportation (DOT) to designate an official to coordinate human trafficking response efforts across the agency and also expands the outreach efforts as part of the Federal Motor Carrier Safety Administration.

MISCELLANEOUS

- NDAA has signed on in support of the [Amy, Vicky and Andy Child Pornography Victim Assistance Act](#) of 2017, which looks at federal statute regarding restitution to child victims of pornography to ensure victims are adequately compensated for damages.
- NDAA has signed on in support of the [Combating Money Laundering, Terrorist Financing and Counterfeiting Act](#) of 2017, which updates federal laws to protect our nation's financial institutions from individuals using the system to launder money and other counterfeit goods.
- NDAA recently [sent a letter](#) to the House Financial Services Committee expressing concerns about not including key provisions of the Incorporation Transparency Act when considering a broader money laundering legislative package.
- Congress recently passed the [Law Enforcement Mental Health and Wellness Act](#), which adds resources to identify health and well-being issues with law enforcement officers. It also directs the Department of Justice (DOJ) to review existing crisis hotlines to make sure they adequately serve law enforcement officers, and directs coordination between DOJ and the Department of Health and Human Services (HHS) and the Department of Veterans Affairs.

Questions or feedback: Please contact Nelson Bunn at nbunn@ndaajustice.org or at 703-519-1666. For a list of the NDAA Legislative Committee members, please visit

<http://www.ndaajustice.org/members/pdf/NDAA%20Committees-2016-2017-v7.pdf>.

The PROSECUTOR

Year in Review: 2017 NDAA Training Highlights

IN 2017, NDAA held 11 national training courses covering topics from prosecuting homicides to the continued rise of digital evidence in cases and how to use that in trial. In addition to the national courses, two training courses were conducted as part of grant work through the Department of Transportation, focused on commercial driver license issues facing prosecutors in their jurisdictions. NDAA trained hundreds of prosecutors at the state and local level in 2017, and plans to expand its national course offerings in 2018 to include courses on mental health, opioids, human trafficking and trials involving a child victim. Below is just a small snapshot of the exceptional training provided by faculty teaching for NDAA in coordination with the association staff. We hope you will join us at our great offerings in 2018!

■ Commercial Driver License Training

January 24–25, Alexandria, VA

June 14–15, Cincinnati, OH



Training attendee takes a turn on the TN Highway Patrol's virtual reality simulator.

The National Traffic Law Center at NDAA conducted two comprehensive courses concerning commercial motor vehicles in 2017 as part of a

grant through the Federal Motor Carrier Safety Administration (FMCSA). The courses focused on the commercial driver license (CDL) and court interaction with commercial motor vehicle traffic. These courses were conducted for 83 people in Alexandria, Virginia in January and 93 people in Cincinnati, Ohio in June.

The goal of the courses was to help attendees understand that tickets for activities that seem somewhat minor when committed by a driver in a car are much more serious when committed by a truck or bus driver. A CDL driver with a failure to use a turn signal ticket has a 96 percent likelihood of being involved in a future crash.

To emphasize the danger, topics in the course included: the complexities of masking and diversion as written in the Code of Federal



Hands-on Level 1 inspection demonstration.

Regulations; impaired, reckless and distracted driving; the importance of prosecution; federal and state requirements prohibiting diversion (plea negotiations) and masking;

Attendees included prosecutors, judges, law enforcement officers, driver agency representatives and persons employed by FMCSA. Attendees inspected trucks with law enforcement inspectors, learned of the use of commercial motor vehicles in human and drug trafficking and how driver's license administrators and enforcement officers with FMCSA attempt to help law enforcement, prosecutors and judges be effective when dealing with commercial driving issues.

Attendees also learned that responsible trucking companies want the help of the judicial system to remove rogue truckers from the road. Bad actors harm the reputation of professional, responsible drivers and companies. To help accomplish that

NDAA Senior Attorney Romana Lavalas presents on CDL basics



goal, representatives involved in monitoring drivers shared information on how to recognize practices that are dangerous. Companies are responsible for the practices of their drivers and need our help to remove those that place the public at risk.

■ Career Prosecutor Course

May 15–25, New Orleans, LA

NDAA held its cornerstone course in New Orleans this year from May 15 to May 25. This course is designed for prosecutors who have made the commitment to public service careers and combines substantive lectures with trial skill-building. Our agenda this year included sessions in cold case homicides, analyzing the crime scene, and new law and trends in fourth amendment, child exploitation, and sexual assault cases. We conducted workshops in directing sensitive witnesses and crossing difficult witnesses, facilitated and critiqued by experienced prosecutors and faculty from around the country. Also, so that our prosecutors continue to be technologically savvy, we directed lectures and workshops on developing advanced PowerPoints and creating and admitting electronic evidence.

New Orleans was a fabulous host for the course. The course was held in the French Quarter and provided a central location for tours of the Garden District and haunted mansions to tastings of beignets and Sazeracs. The attendees and faculty alike enjoyed much-deserved breaks in the evenings and in a weekend free from training.

■ Executive Course

June 12–16, Washington, DC

This year our Executive Course was held in June at the historic Hamilton Hotel in downtown

Washington, DC. Elected and appointed prosecutors, or their appointed assistants, joined NDAA for this annual course. NDAA President Michael Ramos, the District Attorney in San Bernardino County, CA, opened the course with lessons in leadership. Throughout the week, our attendees received guidance on social media, office management, human resources, and how to create crisis management plans to various emergency situations, to include officer involved shootings. They participated in personality tests as tools to understand varying communication styles and studied a sample yearly budget to envision ways to economize and reallocate resources. After full days, the convenient site offered access to the National Mall and varied dining and entertainment options.

The attendees were honored this year with closing remarks from United States Deputy Attorney General Rod Rosenstein. Mr. Rosenstein offered his appreciation for the dedication of prosecutors and law enforcement around the country, while offering programmatic support through the Justice Department.

■ Investigating and Prosecuting Drug Cases September 20–22, Atlanta, GA

NDAA welcomed 135 prosecutors and law enforcement professionals to its Investigating and Prosecuting Drug Cases in Atlanta, Georgia. Attendees heard from experienced prosecutors on topical issues such as the opioid and meth epidemics, trafficking on-line, and the impact of the change in marijuana laws to impaired driving prosecutions. Two Georgia state troopers brought their drug dog to demonstrate a K9 search after a session on K9 Investigations co-taught by a prosecutor and detective. A local Deputy Chief Assistant District Attorney closed the course with dynamic sessions, offering guidance in the use of technology

in search and seizure as well as how to prosecute a multi-defendant drug case.

Located at the CNN Center and across from Centennial Olympic Park, the location gave attendees a great taste of downtown Atlanta. The host hotel offered comfortable accommodations, a 24 hour gym, and was walking distance to two MARTA stations. Restaurants and local attractions were easily accessible for the attendees to enjoy after a full days of training.

■ Prosecuting Sexual Assault and Related Crimes August 14-18, Long Beach, CA

Sexual assault cases are some of the most difficult cases prosecutors, law enforcement, victim witness professionals, and members of the prosecution team will handle. We are inundated with stories in the 24-hour press of women abducted; witness intimidation, safety issues on college campuses; sexual assault and social media; sex trade trafficking; as well as backlash against the victims. With the complexities of victim dynamics, the absence of eyewitness corroboration, delayed reporting; the misuse of technology by defendants for spying and stalking victims, social media issues, as well as the myriad of artful defense claims, these cases challenge traditional prosecution strategies and also test law enforcement protocols and policy. With these challenges in mind, NDAA developed an answer for overwhelmed members of the prosecution team. We gathered an amazing array of prosecutors, health care professionals, mental health care professionals, and an expert on use of trial visuals who provided fundamental topics and cutting-edge information designed to assist the prosecution team in fine tuning their investigation, charging, case analysis, and preparation and litigation skills when managing these difficult cases. Veteran prosecutors were able to share successful resources in

meeting current defense challenges in these complex cases.

We also had the opportunity to hear from the voice of a dynamic survivor of human trafficking. D'Lita Miller is the Founder and CEO of Families Against Sex Trafficking (F.A.S.T.). She also assisted in rescuing her daughter from human trafficking.

It is vital that the victim's fears, anxiety and safety concerns are given priority beginning at the investigative and charging stages as well as during the pendency of defendant's case. She provided important insight to these issues as well as conveying the importance of providing an accurate evaluation and assessment of needs to ensure the provision of essential services for the victim during the pendency of the case as well as post sentencing.

Dr. Christopher F. Wilson, Psy.D., LLC, provided an insightful look into the dynamics of counterintuitive victim behavior, the Neurobiology of Trauma, and the necessity for Trauma Informed Interviewing.

The Renaissance Hotel, Long Beach, California, provided an excellent setting for this course. Attendees were walking distance to the calming waters of Long Beach as well as many eateries.

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■ Domestic Violence & Sexual Assault for the Prosecution Team

October 25-27, Anchorage, AK

At NDAA we can develop courses specifically tailored to your jurisdictional needs. This service includes an initial consultation with one of our training specialists, a proposed budget and course description and a follow up consultation before proceeding with the contract, course development and on site facilitation. This year we had the opportunity to develop and host the Alaska Department of Law's — Annual District Attorney/Paralegal conference. Our theme focused on Trial

Advocacy with emphasis on Sexual Assault and Domestic Violence. The conference was held in Anchorage, Alaska at the Sheraton Hotel.

The training was very successful and was a mixture of lecture style and hands-on trial advocacy for three different levels of experience for prosecutors, and lecture only for their paralegals. Prosecutor hands-on training focused on opening statement, cross-examination and a closing argument using Alaska-based case files with complexities and issues consummate with their skill sets. Topics included — Improving Safety and Privacy for Victims in the 21st Century-Policy Issues and Practical Resources; Stopping Victim Bashing Overcoming the Consent Defense and other Defenses in DV and Sexual Assault Cases; Counter Intuitive Victim Behavior; Witness Issues: Recanting Witnesses, Failure to Appear, and When the Victim Testifies for the Defendant; Tips on Trauma Informed Interviewing and Engaging Victims; Intimate Partner Sexual Abuse: Sexual Intimidation and Coercion and DNA: The Gold Standard Defense Challenges. Prosecutors were also provided a lecture on use of trial visuals and were given the opportunity to work with seasoned NDAA faculty members to build trial visuals for their performance exercises.

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■ Office Administration

November 13-17, Santa Fe, NM

The setting for this year's course was lovely Santa Fe, NM. It was unseasonably warm and the host hotel, the La Fonda provided a lovely setting right on the plaza.

The Office Administration course is unique in that it is our most diverse management program. It is designed to equip the professional administrative personnel in a government attorney's office with the necessary skills to manage an efficient and pro-



All Chief Prosecutors attending or lecturing at OAM.

ductive operation. The Government Attorney's office may be military, civilian, tribal government, federal or state and local. Attendees are a mixture of attorney and non-attorney administrators. Applying general management principles through the use of a variety of formats; lectures, brainstorming sessions, panel discussions, think tanks, practical exercises and actual office situations, our faculty members provided real-world knowledge and strategies in evaluating and dealing with administrative problems unique to government attorney's offices. With the less formal, participatory sessions attendees were able to discuss common issues with their peers from across the country struggling with these same problems. We had a panel session on Top Challenges Faced by Female Managers. Other unique topics included: Managing in a Micropolitan Area; Creating Memorable Websites; The Essence of Leadership; Innovative Office Programs and Initiatives; and A Prosecutor's Guide to Social Media Survival: Proactive Strategies to Deal with Social Media. This year, with the assistance of faculty member Larry Center, former Assistant Dean for Continuing Legal Education at Georgetown University Law Center and former President of

the Association for Continuing Legal Education, we were able to offer six free coaching sessions. These sessions, as well as the lectures on coaching received rave reviews.

■ Forensic Evidence Course

December 11-14, Phoenix, Arizona

The lovely Renaissance Phoenix Downtown was the setting for this year's forensic evidence course. The *Forensic Evidence Course* is designed with the entire prosecution team in mind. There were over 100 attendees gathered for this training, traveling from as far away as Singapore and as close as the local County Attorney and Attorney General's office. As we know, the challenges facing prosecutors, local law enforcement, investigators in prosecutor's offices as well as the laboratory professionals we work with on a daily basis seem to be increasing exponentially with the use by defendants of 21st century sources of evidence. Add to this the multitude and variety of forensic evidence that must be collected, processed and retained appropriately, and we see an amplified need to spread cutting edge education and enhanced awareness to all those working together to ensure justice in our communities. Topics covered included – the no body homicide case, cold cases, manipulation of DNA evidence, injury causation in homicide cases, cross examination of the expert witness, mass shootings, managing the high profile case, serial homicides, electronic evidence and using visuals to increase persuasion in trial. With this diverse and seasoned faculty composed of health care professionals, mental health care professionals, laboratory managers, scientists, and prosecutors, we were able to address the challenges inherent when investigating, engaging in pretrial preparation and presenting the violent crime case involving a variety of scientific evidence.

The PROSECUTOR

My Wrongful Conviction

BY BILL WIRSKYE



Reprinted from The Texas Prosecutor journal with permission from the Texas District and County Attorneys Association.

I RECENTLY DISCOVERED that I had a wrongful conviction in my past. But this wrongful conviction was not that of an innocent person sent to prison for a crime he didn't commit. The conviction I'm talking about was a belief—a very strongly held belief I had about prosecution. I now believe I was wrong in this conviction, and I was wrong about wrongful convictions.

As a newly minted prosecutor in the Dallas County Criminal District Attorney's Office in the mid-1990s, it never occurred to me that I could wrongfully convict someone. After all, I had been taught that I was one of the good guys. I worked in the best criminal justice system in the world. We had checks and balances built in to the system to prevent just such a miscarriage of justice. I genuinely believed that if I was an honest and hardworking prosecutor, I would always get the right guy. Everyone I worked with shared these same fundamental beliefs. We all knew our duty under Brady, and we tried our best to comply. That was our office culture. We were proud to be prosecutors and considered ourselves "crime fighters" in the courtroom. Although I'd heard vague stories about wrongful convictions in other states, frankly they didn't seem very real to me, and I certainly didn't consider these stories to be any sort of a cautionary tale for me in my daily work.

But beginning in the early 2000s, Dallas became the epicenter of the DNA exoneration movement. As the number of DNA exonerations began to climb, I was forced to con-

front both the fallibility of the criminal justice system and the fallibility of my personal beliefs and convictions. From what I could tell, we didn't prosecute any differently in Dallas than prosecutors did in the rest of the state, but the media's narrative of that era was that a "win-at-all-costs, convict-them-all" culture in the Dallas DA's Office was to blame for the wrongful convictions. Dallas County prosecutors so valued convictions, this reasoning went, that we would routinely cut ethical corners without regard for whether we actually had the right guy.

This, of course, was utter nonsense. That was not the office culture I knew. The prosecutors involved in the exonerations were good, honest people, genuinely trying to get the right guy the right way. While I can never be sure that some Dallas prosecutor didn't intentionally cut corners in one of those cases, even one or two of these "bad apples" wouldn't explain the sheer number of wrongful convictions. The Innocence Project lists a total of 24 DNA exonerations in Dallas County.¹ So, exoneration by exoneration, I became increasingly aware of the limitations of our system and my own limitations as a prosecutor. It certainly seemed that our shared belief in honesty and hard work, while good, was not enough to prevent all the wrongful convictions occurring in Dallas. And even as I redoubled my efforts to avoid convicting an innocent person, I really had no new strategies or tactics to employ. In truth, I guess I just worried about it more because I was scared it could happen to me.

Probably because of these experiences in Dallas early in my career, I became intrigued with how we as prosecutors

Bill Wirske is the First Assistant Criminal District Attorney in Collin County, Texas.

could do better. How can we convict the right guy, the right way, the first time? When I returned to prosecution in 2015 after eight years as a defense lawyer, I made a very conscious decision to study wrongful convictions and immersed myself in the world of conviction integrity and actual innocence. Fortunately, my elected DA, Greg Willis, shared my curiosity on the subject, and he encouraged me

When I returned to prosecution in 2015 after eight years as a defense lawyer, I made a very conscious decision to study wrongful convictions and immersed myself in the world of conviction integrity and actual innocence.

to follow my interest. I began to attend every seminar and training I could find that dealt with this topic. Oftentimes I was treated as somewhat of a curiosity—a former Dallas County death penalty prosecutor who claimed to have an interest in getting it right and making the criminal justice system better. I’d frequently find myself as the only prosecutor in the room, surrounded by defense lawyers, law professors, and other prosecutorial skeptics who seemed somewhat puzzled I had managed to infiltrate their midst. I learned quickly, however, that despite our differences, we shared a common interest—namely, a strong desire to improve our criminal justice system.

This realization gives me hope that moving forward we can undertake any necessary prosecutorial reforms in a collaborative manner, engaging all the stakeholders in the system. I’ve met so many defense lawyers and academics of good will and good conscience that I can no longer reflexively ignore their criticism. Instead, I want to leverage their input as we undertake an exhaustive and collective re-examination of our profession to help find new and better ways to see that justice is done.

While I realize that other actors in the criminal justice system also have a responsibility to prevent wrongful convictions, I think prosecutors should lead the way because justice is our business. Some exciting work in this area has already been done, and some promising themes and solutions are starting to emerge for me. While these may not be entirely satisfying or comprehensive, I do believe they can make us better prosecutors and reduce the chances of obtaining a wrongful conviction.

BRADY SOMETIMES ISN’T ENOUGH, SO EMBRACE THE MICHAEL MORTON ACT.

I had always assumed that our honest adherence to Brady was the ultimate safeguard for prosecutors against widespread wrongful convictions. The Dallas DNA exonerations proved me wrong. Brady was never meant to be a pre-trial test employed by trial prosecutors to decide what to turn over to the defense. Rather, Brady is a post-conviction harm-analysis test to be used by appellate courts. Applying the Brady test pre-trial requires a prosecutor to make a prospective guess about what is favorable evidence for the defense and whether it will ultimately be material. This can be a trap for unwary or unlucky trial prosecutors. This seems ridiculously clear with the benefit of hindsight, but I know it never occurred to me until the 2014 legislative changes gave me some valuable and overdue perspective on the inherent limitations of Brady.

So now we prosecute in the post-Brady world of the Michael Morton Act. An open file and complete transparency is the law of the land in Texas. This new approach certainly takes the guesswork out of discovery for prosecutors, and for that reason alone, I’m in favor of the Morton approach to discovery, even if I have to burn a few dozen disks in even the simplest of cases. While there’s no guarantee that Morton will be a better safeguard, it appears to be an improvement over Brady in preventing wrongful convictions. I guess only time will tell.²

EYEWITNESS EVIDENCE IS NOT THE “GOLD STANDARD” WE ONCE THOUGHT, SO CORROBORATION IS THE KEY.

Like so many prosecutors who came before me, I had always considered eyewitness testimony to be the gold standard of reliable evidence. Eyewitnesses have the power to persuade detectives, prosecutors, and juries, but the DNA exonerations and continued research into eyewitnesses and the process of memory have challenged our understanding of the reliability of this type of testimony. The human eye is

no longer compared to a camera and the human memory is no longer analogized to a DVR. It turns out that eyewitness testimony is a far more complicated matter than we initially thought.

Independent corroborative evidence is now the key for investigators and prosecutors to shore up eyewitness identifications. It has helped me to think of eyewitness evidence as trace evidence—that is, memory is malleable and can be contaminated much like the more traditional types of trace evidence. I now believe that an eyewitness's memory should be treated as the “unseen crime scene”—kept secure from improperly suggestive outside influences. Although the research in this area often seems contradictory, two key takeaways have emerged: Prosecutors must be more cautious of this type of evidence, and we must increasingly rely on corroboration. But because eyewitnesses will continue to play an important role in the investigation and prosecution of crime, it will be incumbent on us to learn the latest research and employ the latest best practices.³

WE AS PROSECUTORS ARE NOT IMMUNE TO COGNITIVE BIAS, SO BEWARE.

Cognitive bias⁴ is a term for certain subconscious and predictable thinking errors that all humans make. These pose a real threat to prosecutors, and they can take many forms. The well-known bias of “tunnel vision” can infect an investigation or prosecution by blinding police and prosecutors to other alternative suspects or explanations. The

The well-known bias of “tunnel vision” can infect an investigation or prosecution by blinding police and prosecutors to other alternative suspects or explanations.

related concept of “confirmation bias” is the tendency to search for, interpret, favor, and recall information in such a way that confirms one's pre-existing beliefs. Consider the common scenario where the police file a case with the local prosecutor's office and vouch that their investigation has revealed that the defendant is the right guy. How hard is it for us to completely distance ourselves from their conclusion and take a look at the evidence with truly objective eyes? I know I struggle daily with this task, so I frequently try to read the file a second time with a “devil's advocate” frame of mind to try to control for any bias on my part.

Many prosecutors will “pitch” their case to a group of other experienced prosecutors and investigators to make sure they are not missing some important fact or angle due to bias or tunnel vision. The theory is that the more eyes on the case and the more brains thinking about it, the less chance something will be missed. The goal here is to seek creativity and not necessarily consensus. Every assumption and piece of evidence should be challenged in this meeting while never assuming the defendant's guilt. While this is often done informally in many offices, I like the organized “pitch session” best because it forces attendees to deliberately change their perspective while considering the case.

Although there is no simple fix for the threat of cognitive bias creeping into our decision making, a simple technique like the pitch session can help counteract any potential tunnel vision or confirmation bias.⁵

OUR JOB HAS GROWN INCREASINGLY COMPLEX, SO WE MUST BE COMMITTED TO CONTINUAL LEARNING.

Basic advocacy skills and some on-the-job training in the forensic sciences are no longer good enough to be a conscientious prosecutor in today's world. A prosecutor must be a perpetual student, systematically developing a working expertise in the increasingly complex⁶ and changing fields of forensic science and technology. We must now be at the very cutting edge of knowledge, all the time, to both exonerate the innocent and convict the guilty.

But is this realistic considering how busy we all are and how tight our training budgets are? The answer is an emphatic “yes” if a prosecutor is motivated, interested, and intentional. In addition to the wealth of free information available on the internet, most traditional training providers for Texas prosecutors are offering specific courses to address the new need for us to become near-experts in a diverse array of forensic and technological disciplines.⁷ Many of these courses are low-cost or no-cost to Texas prosecutors.⁸ We must be very intentional in how we plan our own con-

tinuing education. What are the areas in which we are lacking knowledge? What are the dynamic or contested areas?⁹ How can we be systematic and comprehensive in learning a desired topic? This type of commitment to continual learning is a sure sign of a professional prosecutor.

WE MUST STUDY OUR MISTAKES SO WE CAN LEARN FROM THEM.

When mistakes are made in the fields of aviation or medicine, the mistake itself is studied for potential lessons to help avoid another error and strengthen the process and system.¹⁰ We must adopt this mindset in criminal justice. Each mistake is an opportunity to prevent a future mistake and improve the system. As prosecutors, we no longer have the luxury of ignoring our mistakes. We must confront them and then aggressively mine them for lessons learned and best practices. This is equally true of both the intentional bad-apple, misconduct-type mistake, as well as the more common unintentional or negligent mistake.

A method like “root-cause analysis”¹¹ (also called a “sentinel event review”¹²) is a proven way to investigate an erroneous outcome that may signal a weakness in a complex system. This type of analysis brings together stakeholders to determine, in an objective and blame-free environment, why a mistake occurred. This analysis can also be used to investigate a “near miss”—a situation where a mistake is narrowly averted. Root-cause analysis is being increasingly used in the criminal justice system to examine events such as wrongful convictions, forensic lab errors, or even officer-involved shootings, and the lessons learned thus far show great promise.

PARTING THOUGHTS

I will forever be grateful to our crime lab in Dallas for saving all the evidence for future DNA testing. Only because of the forethought of those authorities could such wrongs of the past be righted.

While many things have changed about our profession since I started, some of my fundamental convictions about what it takes to be an effective prosecutor have not. For instance, I still believe that being an honest and hardworking prosecutor is a prerequisite for success. But one of my early convictions about prosecution was wrong: I thought then that honesty, hard work, and Brady were enough to guard against a wrongful conviction. As it turns out, this mistaken belief was a wrongful conviction on my part. I now have a new and hard-earned humility about the potential fallibility of both the system and myself. I hope

this humility makes me a better prosecutor. I think it does.

ENDNOTES

- ¹ <https://www.innocenceproject.org>.
- ² I believe that anyone who works in the criminal justice system should study the Michael Morton case for lessons learned. I recommend his book *Getting Life: An Innocent Man's 25-Year Journey from Prison to Peace*. Simon & Schuster, 2014. *The Texas Monthly* archives also contains a wealth of information on the case, and they can be accessed at <https://www.texasmonthly.com/category/topics/michael-morton/>.
- ³ Two eyewitness evidence must-reads for prosecutors are *Eyewitness Evidence: A Guide for Law Enforcement*, National Institute of Justice, 1999, found at <https://www.ncjrs.gov/pdffiles1/nij/178240.pdf> and *Identifying the Culprit: Assessing Eyewitness Identification*, National Research Council, 2014, found at <https://www.nap.edu/catalog/18891/identifying-the-culprit-assessing-eyewitness-identification>.
- ⁴ For an overview of cognitive bias and decision-making, read Daniel Kahneman's *Thinking Fast and Slow*, Farrar, Straus, and Giroux, 2011, and *The Invisible Gorilla: How Our Intuitions Deceive Us*, Crown Publishing, 2010. D, by Christopher Chabris and Daniel Simons. Kim Rossmo's excellent *Criminal Investigative Failures*, CRC Press, 2009, covers the dangers of cognitive bias in criminal investigations.
- ⁵ For more information on the concept of an organized “devil's advocate” approach to combat cognitive biases, see Bryce G. Hoffman's *Red Teaming: How Your Business Can Conquer the Competition by Challenging Everything*, Crown Business, 2017.
- ⁶ Read Atul Gawande's book *The Checklist Manifesto: How to Get Things Right*, Metropolitan Books, 2009, to explore how failures can result from complexity and volume of knowledge.
- ⁷ In addition to the great training provided by TDCAA (<https://www.tdcaa.com/training>), the National District Attorneys Association (http://www.ndaa.org/upcoming_courses.html) and the Association of Prosecuting Attorneys (<http://www.apainc.org/upcoming-events>) also offer training specifically for prosecutors. The Center for American and International Law (www.cailaw.org/Criminal-Justice/index.html), too, provides criminal justice practitioners training in actual innocence.
- ⁸ For an idea of the latest criticisms in the dynamic world of forensic science, see *Strengthening Forensic Science in the United States*, National Research Council, 2009, found at <https://www.ncjrs.gov/pdffiles1/nij/grants/228091.pdf> and *Report to the President Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods*, the “PCAST Report,” President's Council of Advisors on Science and Technology, 2016, found at https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf.
- ⁹ Matthew Syed's *Black Box Thinking: Why Most People Never Learn From Their Mistakes—But Some Do*, Portfolio/Penguin, 2015, and Gawande's *Checklist Manifesto* both explore this process.
- ¹⁰ See National Commission on Forensic Science, Directive Recommendation: Root Cause Analysis (RCA) in Forensic Science found at <https://www.justice.gov/archives/ncfs/page/file/641621/download> for an explanation of the principles of root cause analysis in the forensic science context.
- ¹¹ See the National Institute of Justice's Sentinel Event Initiative web page at <https://www.nij.gov/topics/justice-system/Pages/sentinel-events.aspx> for further study.
- ¹² In 2015, the National Institute of Justice and the Quattrone Center for the Fair Administration of Justice at the University of Pennsylvania Law School collaborated on a multi-stakeholder sentinel event review involving a notorious crime. The resulting report can be found at <https://www.law.upenn.edu/live/files/6850-lex-st-report>. This report is an excellent example of mining mistakes to make the criminal justice system better.

The PROSECUTOR

Change of Heart

Aurora Officers' Efforts Prompt Sisters to Rethink Opinions About Police

BY CHRISTOPHER NELSON



Dezember Barnes (left) and her sister Symone Barnes (right) met Aurora Police Officer, Nikole Petersen, during this summer's Law Enforcement Youth Academy.

Academy, which is sponsored by the Kane County State's Attorney's Office in partnership with the Aurora Police Department and the Kane County Sheriff's Office.

The Barnes sisters were at first unwilling participants, but quickly changed their minds, not only about the academy, but also their personal feelings about police officers and the important role police officers play in the community.

SYMONE BARNES HAD SEEN the news stories and the social media reports about Tamir Rice, Philando Casteel, Freddie Gray and other African-Americans who died after encounters with police officers.

An African-American student at West Aurora High School, her mind was made up — she had already decided that she could not trust the police. Her younger sister, Dezember Barnes, was the same.

"We hated law enforcement," Symone said bluntly. "We saw a lot of negative things on social media and in the news. It took a toll on my opinion. I was scared to do certain things. I didn't get my driver's license right away because of what I'd seen."

The sisters' opinions dramatically changed, however, thanks to the efforts of several Aurora police officers through the annual summer Law Enforcement Youth

'FORGET THE BAD SEEDS'

Terra Barnes knew her daughters' fears, and she shared many of them. Her family was related through a marriage to Sandra Bland, the former Naperville woman who in 2015 was found dead in a Texas jail cell after she was arrested during a traffic stop. Although Bland's death was ruled a suicide, questions linger about how and why she died.

Terra also believed that despite their fears, her daughters needed to understand that far more police officers than not are good, fair and trustworthy.

So late this past spring, not long after Dezember had been bullied at school and then felt that her complaint about being bullied was mishandled, Terra made a desperate call to the SAO's Pam Bradley to inquire about the academy.

Christopher Nelson is the public information officer for the Kane County, Illinois State's Attorney's Office.

"I knew if they came across one good person, maybe they'd forget about the bad seeds," said Terra, who helps to manage a family catering business in Aurora, Illinois' second-most populous city.

Pam, who is in her 19th year with the Kane SAO, coordinates the academy, which completed its 15th year this past August. Pam, who works in the Child Support Unit, gets assistance for the academy from the SAO, along with the Aurora Police Department, the City of Aurora, the Kane County Sheriff's Office, the FBI and Kane County judges.

The academy runs for seven weeks every summer at the Aurora Police Department and Simmons Park across the street, emphasizes physical and mental requirements, and other aspects of a career in law enforcement. Participants are middle school and high school students from Kane County. Most are from the Aurora area, and many are from at-risk neighborhoods.

"The academy is an important outreach opportunity for our office, for police and others in law enforcement, and for our justice system," said Joe McMahon, Kane County's state's attorney since 2010. "It brings police officers and young people in Kane County together and reaffirms that police are here to help them and not to be feared, it helps youths see that they can achieve great things, and it gives them a taste of potential career opportunities.

"I'm proud to be a part of this program, I'm especially proud Pam Bradley and her work, and I'm grateful for the contributions of the Aurora Police Department and Chief Kristen Ziman, and the Kane County Sheriff Don Kramer and his team."

More than 300 students have graduated from the academy in its 15 years. Many have become police officers, served in the military, and even attended law school.

Symone and Dezember were among 47 participants in 2017.

"Symone and Dezember's success wasn't just that they changed their minds about the police," Pam said. "It's also that they allowed their natural leadership skills to shine through. They are very special girls who have bright futures."

Terra heard about the academy from a friend whose children had participated. When she called the SAO to inquire about enrolling her daughters, she wasn't sure Pam would respond because the academy had already started.

"I was begging for Miss Pam not to get back to my mom," Dezember said. "But she did."

Once Terra knew her daughters would be allowed to participate, her next step was to get them there.

"Mom told us we were going, and to get dressed," Symone said. "I thought, 'no way.' But we went."

When they arrived at the Aurora Police Department, Terra had to beg the girls to get out of the car.

"As soon as we walked through the doors, I knew we had no choice," Dezember said.

Aurora Officer Nikole Petersen, who was assigned to work the academy this year with fellow Aurora Officers David Bemer and John Gray, said the Barnes sisters weren't the most reluctant participants, however.

"One kid, we went to his house and dragged him out of bed," Officer Petersen said.

The Barnes sisters quickly learned from the officers that they were in for a positive experience.

"They made it known that no matter what, we were all connected, all the same," Dezember said. "You could feel the love, like a family."

HARD WORK, TEAMWORK

The participants were divided into three teams, which competed against one another. Within the teams the officers emphasized teamwork through group conversations and physical activities.

Success in the physical activities, such as running, rolling large tires or climbing a concrete wall, was based on the team's overall performance. Each individual had to succeed for the team to succeed, so the team was only as good as its weakest link.

"It was hard, and we had to rely on our teammates, which was difficult when they weren't trying as hard because it affected how we performed," Symone said. "No one wanted to finish in last place."

Symone, who is a cheerleader, plays the saxophone, sings and hopes to become a journalist, said the physical activities initially were overwhelming.

"I had no stamina at first," said Symone, who is a junior this year. "But I started to improve within the first three days. They never gave up on me."

Symone said Officer Petersen took particular delight in teasing her because she's a cheerleader.

"She thought I was soft, and I was," Symone said.

Petersen laughed at the recollection but said she didn't tease Symone for being a cheerleader.

"It was because she wore makeup," Petersen said. "Who wears makeup to work out?"

Dezember, who is a sophomore, plays basketball and tennis. Despite being more athletic than her older sister, she also struggled at first, but learned from Officer Bemer to succeed by prioritizing the team.

"The officers were clear that they were never going to stop trying with us," Dezember said. "When we did work-



Youth academy participants engage in a variety of physical activities during their seven weeks together, everything from pushing a car to rolling a tractor tire end over end.

outs, I made it harder for the entire squad. Bemer would tell me that if I failed, we all would fail. He would really push me. Then I realized he wasn't going to stop, so I finally started to push myself."

Petersen said the sisters didn't resist for long.

"The change in them was quick. They were on board by the second week," Officer Peterson said.

The change wasn't just in working harder. It also was in helping the girls discover their leadership skills.

"They were really quiet at first. But once Dezember got in front of the class, I could see that she wanted to be a leader. If another girl didn't participate, I relied on Dezember to get her to join the group."

The sisters said a key to their improved attitude was learning how much they could trust the officers.

"They made it clear that no matter what, we were all connected, all the same," Dezember said. "We could all feel the love of family and togetherness, and that they were determined to get us united as a group."

LEARNING TRUST

The girls also said Pam Bradley's approach — the participants call her "Miss Pam" — was important in getting them to trust others.

"Miss Pam ... the mother. She could be strict," Dezember said. "I love her. She was my motivation to do better. I never wanted to let her down. Plus, she answered my mom's call. I had to prove to her that I was there for a reason."

Said Symone, "Miss Pam is a special person. "You can feel her presence, her natural love. We've made her a part of our family."

The sisters since have joined the academy's alumni group, which meets monthly. Both have plans for beyond high school based on their experiences in the academy. Symone wants to be a journalist and be a force for excellence.

"The next generation needs to see there is good in the world and not be consumed by bad things," she said. "People need to be positive and they need role models, just like Petersen, Bemer and Gray gave us mother and father figures."

Dezember plans to go to law school and eventually own her own law firm as a defense attorney.

"There's still racism out there, and I feel that as a defense attorney I can show right from wrong," she said.

Their mother said she still marvels at the positive change in her daughters.

"They were thanking me within a couple of days. I want to ask the officers what they did," Terra said.

GOOD V. BAD

Another youth academy success story is Merina Olvera.

She, too, was a reluctant participant at first, Pam said. Merina didn't trust the police, and had been recruited to join a gang. Although she hadn't joined, she was considering it and had many friends who were gang members. Then she became involved in the youth academy.

In mid-August, near the end of the academy, Denise Crosby, a columnist for the *Aurora Beacon-News*, spoke with Merina about the academy.

When the column was published, an acquaintance who was a gang member retaliated against her for participating in the academy. He threatened Merina on social media and threw a brick through a window at her home.

Merina immediately confronted the person she believed was responsible and called the police.

Because of the relationship she'd built with APD through the academy, she was able to help police identify the suspect, who was charged with multiple felonies, including residential burglary, possession of a stolen firearm and criminal damage to property. The case was adjudicated in juvenile court.

The PROSECUTOR

Combatting Crime on the Dark Web

How Law Enforcement and Prosecutors are Using Cutting Edge Technology to Fight Cybercrime¹

BY B. J. ALTVATER



¹ The author of this article is Georgetown Law student, B.J. Altvater. The article was written as part of the Best Practices for Justice Prosecutor Practicum at Georgetown Law School. Specific thanks go to John Temple, Assistant District Attorney in charge of the Human Trafficking Program in the New York County District Attorney's Office for his insights and com-

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CRIMINALS ARE INCREASINGLY using shadowy corners of the internet to mask their identities and conduct illicit activities. Marketplaces on the “dark web” facilitate a range of criminal activities, including human trafficking and the distribution of child pornography. However, law enforcement and prosecutors are not helpless in the fight against these new criminal tactics. This paper will focus on two ways that law enforcement and prosecutors have utilized technology to find and prosecute criminals on the dark web. Part 1 of this article explains this new terrain of criminal activity by exploring the differences between the surface web, deep web, and dark web. Part 2 explores the use of Network Investigative Techniques (NITs) to pierce the anonymity of criminals on the dark web. Finally, Part 3 discusses a new toolkit of programs that can help investigators combat human trafficking with data-mining of the dark web.

PART I—WHAT IS THE DIFFERENCE BETWEEN THE SURFACE WEB, DEEP WEB, AND DARK WEB?

The average person interacts with the internet on what is referred to as the “surface web.” The common definition of the surface web is all web pages that are indexed by normal search engines (e.g. Google, Yahoo, or Bing). Search engines index web sites by following the links to all available sites and mapping out the web of connections.² For example, social media, news sites, and online retailers all exist on the surface web. According to one study, the surface web contains over 4 billion indexed web sites.³

As big as that sounds, many experts believe that the surface web makes up less than 1% of the internet.⁴ The much larger part of the internet is made up of content that is not indexed and is referred to as the “deep web.” One large source of deep web content is databases.⁵ Some very large databases on the deep web are available to the public, such as those hosted by the U.S. Census Bureau, Securities and Exchange Commission, and Patent and Trademark Office. Other databases are owned by companies (e.g. LexisNexis and Westlaw) that charge a fee to access the content.⁶ Another large source of content on the deep web is private networks, like those operated by companies, universities, or government agencies.⁷

The “dark web” is similarly made up of sites that are not indexed by search engines. However, websites on the dark web are also anonymously-hosted and are only accessible with special software and browsers that mask one’s IP address.⁸ The most common tool to navigate the dark web is the Tor (The Onion Router) browser.⁹ Tor routes internet traffic through a series of “nodes,” which are computers hosted on the Tor network by volunteers. The process of randomly bouncing data through many different nodes makes it nearly impossible to trace the data back to an internet user.¹⁰ In fact, the U.S. Naval Research Laboratory initially developed Tor as a way to secure communications.¹¹

While the dark web was not designed to facilitate criminal enterprises, law enforcement and prosecutors are increasingly facing legal challenges involving anonymous services online. In fact, one recent study revealed, “the most common uses for websites on Tor hidden services are criminal, including drugs, illicit

² Jose Pagliery, *The Deep Web You Don't Know About*, CNN MONEY (Mar. 10, 2014), <http://money.cnn.com/2014/03/10/technology/deep-web/index.html>.

³ THE SIZE OF THE WORLD WIDE WEB (THE INTERNET), <http://www.worldwidewebsite.com> (last visited Oct. 30, 2016).

⁴ Pagliery, *supra* note 1.

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ Cadie Thompson, *Beyond Google: Everything You Need to Know About the Hidden Internet*, TECH INSIDER (Nov. 25, 2015), <http://www.techinsider.io/difference-between-dark-web-and-deep-web-2015-11>.

⁹ *Id.*

¹⁰ Tor Project, <https://www.torproject.org/about/overview.html.en> (last visited Oct. 30, 2016).

¹¹ Geoffrey A. Fowler, *Tor: An Anonymous, And Controversial, Way to Web-Surf*, THE WALL STREET JOURNAL (Dec. 12 2012), <http://www.wsj.com/articles/SB10001424127887324677204578185382377144280>; see also Damon McCoy et al., *Shining Light in Dark Places: Understanding the Tor Network*, UNIVERSITY OF COLORADO, BOULDER, CO, http://homes.cs.washington.edu/~yoshi/papers/Tor/PETS2008_37.pdf.

finance and pornography involving violence, children and animals.”¹²

PART 2—HOW CAN PROSECUTORS AND LAW ENFORCEMENT USE NETWORK INVESTIGATIVE TECHNIQUES (NITs) ON THE DARK WEB?

Criminal actors and organizations are increasingly relying on the anonymity provided by the dark web to host web sites that traffic illicit materials and content. One way that law enforcement and prosecutors are able to pierce the dark web’s cloak of anonymity is by employing a network investigative technique (NIT). Operation Pacifier is a recent example where the FBI and DOJ employed an NIT to find and prosecute criminals operating on the dark web. While the use of NITs has been limited to federal law enforcement, state and local law enforcement agencies with advanced cyber capabilities may employ this tactic in the future.

What is Operation Pacifier?

In August 2015, a new website called “Playpen” appeared on the dark web.

Playpen’s focus was “the advertisement and distribution of child pornography,” and this new site allowed users to post images.¹³ The site had almost 60,000 accounts registered in its first month and nearly 215,000 accounts by 2016.¹⁴ Playpen hosted over 117,000 posts with 11,000 visitors per week, and much of the content included “some of the most extreme child abuse imagery one could imagine.”¹⁵ The FBI described Playpen as “the largest remaining known child pornography hidden service in the world.”¹⁶

In February 2015, the FBI seized the server running Playpen from a web host in Lenoir, North Carolina.¹⁷ However, the FBI did not immediately shut the site down.¹⁸ Instead, the FBI operated the site from its own servers in Virginia from February 20th to March 4th.¹⁹ While the FBI maintained control of Playpen during this period, law enforcement officers were able to deploy a network investigative technique (NIT) to identify, and later prosecute, users of the site.²⁰

The FBI’s efforts to take control of Playpen’s servers, deploy an NIT (i.e. a hacking tool) to identify users,

Playpen’s existence in the dark web meant that the locations of both its servers and the computers accessing the site were concealed.

and then prosecute individuals on child pornography charges became known as Operation Pacifier.²¹ Currently, the Department of Justice has publicly acknowledged, “at least 137 cases have been filed in federal court as a result of this investigation.”²² An FBI special agent explained in one court that “The NIT was deployed against users who accessed posts in the ‘Preteen Videos—Girls Hardcore’ forum because users accessing posts in that forum were attempting to access

¹² Daniel Moore & Thomas Rid, *Cryptopolitik and the Darknet*, SURVIVAL: GLOBAL POLITICS AND STRATEGY 21 (Feb. 1, 2016) <http://www.tandfonline.com/doi/pdf/10.1080/00396338.2016.1142085?needAccess=true>.

¹³ Joseph Cox, *The FBI’s ‘Unprecedented’ Hacking Campaign Targeted Over a Thousand Computers*, MOTHERBOARD (Jan. 5, 2016) <https://motherboard.vice.com/read/the-fbis-unprecedented-hacking-campaign-targeted-over-a-thousand-computers>.

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ Joseph Cox, *Dozens of Lawyers Across the US Fight the FBI’s Mass Hacking Campaign*, MOTHERBOARD (Jul. 27, 2016), <https://motherboard.vice.com/read/dozens-of-lawyers-across-the-us-fight-the-fbis-mass-hacking-campaign-playpen>.

²² *Id.*

or distribute or advertise child pornography.”²³ Additionally, Judge Robert J. Bryan has stated “The FBI setup the NIT so that accessing the forum hyperlink, not Website A’s [Playpen] main page, triggered the automatic deployment of the NIT from a government-controlled computer in the Eastern District of Virginia.”²⁴

What is a Network Investigative Technique (NIT)? Playpen’s existence in the dark web meant that the locations of both its servers and the computers accessing the site were concealed. As discussed above, users could only access the site via the Tor browser, which anonymized user traffic. As part of Operation Pacifier, the FBI successfully located the Playpen server and gained control. However, the FBI still was not able to identify the locations of individuals who were posting or consuming child pornography on the web site through Tor.²⁵ In order to determine the Playpen users IP addresses, the FBI employed a court-authorized hacking method referred to as an NIT.²⁶

An NIT consists of four main components: (1) a generator, (2) an exploit, (3) a payload, and (4) a logging server. A generator runs on the “hidden service” (e.g.

Playpen) and produces a unique identification (ID) number that is associated with each user of the dark web site. The generator then transmits that unique ID, along with the exploit and payload, to each user’s own computer. Once on a user’s computer, the exploit takes control of the Tor browser (i.e. hacks) and executes the payload. The details of exactly how the exploit works is “the most sensitive part of an NIT — public disclosure not only risks losing the opportunity to use the technique against other offenders but would also permit criminals or authoritarian governments to use it for illicit purposes until a patch is developed and deployed.”²⁷

Next, the payload searches a user’s computer for

those materials authorized in a search warrant. Relevant information would likely include the individual’s username, the unique identifying number of the computer’s network card (i.e. MAC address), and the computer’s name. After identifying this information, the payload sends it to the logging service and creates a record of the computer that the user used to access the dark web site. This process also allows the payload to capture the public IP address of the user’s computer. The logging service records all of the information sent from the payload on a separate computer at the FBI.²⁸

The FBI can then use the IP addresses to serve a subpoena on an internet service provider, which will provide the government with a user’s name and physical address. Armed with probable cause that the user accessed illegal content, the FBI then obtains a search warrant for the user’s computer. By seizing the computer, the government is able to prove that the same computer with that NIT accessed the dark web site.²⁹

What Are the Key Legal Defenses to Operation Pacifier Prosecutions?

Two common defense strategies have unfolded from the current prosecutions of individuals identified by FBI’s use of an NIT under Operation Pacifier: (1) compel the government to disclose the NIT’s sensitive exploit code, and (2) challenge the warrant as fundamentally flawed.³⁰

“Disclose or Dismiss”

One defendant charged as part of Operation Pacifier was able to keep evidence out of court by requesting all of the source code for the NIT. Jay Michaud, a public school administrator in Vancouver, Washington, was arrested in July 2015 as part of the FBI’s investigation and deployment of an NIT involv-

²³ Joseph Cox, *FBI: Hacking Tool Only Targeted Child Porn Visitors*, MOTHERBOARD (Jul. 29, 2016), <https://motherboard.vice.com/read/fbi-hacking-tool-only-targeted-child-porn-visitors>.

²⁴ *Id.*

²⁵ Susan Hennessy & Nicholas Weaver, *A Judicial Framework for Evaluating Network Investigative Techniques*, LAWFARE (Jul. 28, 2016, 10:17 AM), <https://lawfareblog.com/judicial-framework-evaluating-network-investigative-techniques>.

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ Cox, *supra* note 20.

ing the Playpen web site.³¹ Michaud's attorneys requested the course code for the NIT, which they argued they needed in order to understand how the government identified their client.³²

The government initially turned over an incomplete version of the NIT code, but the defense believed that critical pieces were missing.³³ Michaud's attorneys argued they needed the part of the code that could determine whether the NIT-produced identifier assigned to Michaud's computer was, in fact, unique.³⁴ Michaud's team also requested the exploit code that was used to bypass his web browser because, they argued, they needed the exploit details to ensure that the NIT did not engage in any actions beyond the government's description of the code.³⁵

The government responded by stating that defendant's discovery request of the NIT source code had no bearing on the large amounts of child pornography that the FBI found on Michaud's thumb drives and cell phone.³⁶ However, Judge Robert J. Bryan of the Western District of Washington disagreed, and he ordered the government to turn over the full NIT source code, stating:

"Much of the details of this information is lost on me, I am afraid, the technical parts of it, but it comes down to a simple thing ... You say you caught me by the use of computer hacking, so how do you do it? How do you do it? A fair question ... The government should respond under seal and under the protective order, but the government should respond and say here's how we did it."³⁷

In response, the Department of Justice filed a sealed motion asking the judge to reconsider.³⁸ An FBI agent

involved in Operation Pacifier also provided a public statement where he rebuffed the defendant's rationale for requesting the entire NIT source code.³⁹ He explained, "Discovery of the 'exploit' would do nothing to help [the defense] determine if the government exceeded the scope of the warrant because it would explain how the NIT was deployed to Michaud's computer, not what it did once deployed."⁴⁰ He continued, "Determining whether the government exceeded the scope of the warrant thus requires an analysis of the NIT instructions delivered to Michaud's computer, not the method by which they were delivered."⁴¹

However, Judge Bryan still ruled that the defendant was entitled to see the NIT exploit code under a protective order. As discussed above, the exploit code

The FBI and DOJ attorneys concluded that disclosure of the NIT exploit code, even under a protective order, involved too great a risk to continue the case against Michaud.

details how the FBI was able to circumvent the privacy protections built into the Tor Browser and is the most sensitive part of the NIT. In the case against Michaud, the DOJ ultimately refused to produce the information for Michaud, and Judge Bryan suppressed the evidence.⁴² The FBI and DOJ attorneys concluded that

³¹ Joseph Cox, *Transcript Shows Why a Judge Ordered the FBI to Reveal Its Mass Hacking Malware*, MOTHERBOARD (Feb. 24, 2016), <http://motherboard.vice.com/read/transcript-shows-why-a-judge-ordered-the-fbi-to-reveal-mass-hacking-malware-playpen-jay-michaud>.

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ Joseph Cox & Sarah Jeong, *FBI Is Pushing Back Against Judge's Order to Reveal Tor Browser Exploit*, MOTHERBOARD (Mar. 29, 2016), <https://motherboard.vice.com/read/fbi-is-pushing-back-against-judges-order-to-reveal-tor-browser-exploit>.

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² Joseph Cox, *A Judge Just Made It Harder for the FBI to Use Hacking*, MOTHERBOARD (May 25, 2016), <https://motherboard.vice.com/read/playpen-tor-browser-exploit>.

disclosure of the NIT exploit code, even under a protective order, involved too great a risk to continue the case against Michaud.

Challenging the Search Warrant

Another defense successfully employed by an Operation Pacifier defendant, Alex Levin, is to challenge the search warrant for the NIT.⁴³ Defendants have successfully challenged the validity of the search warrant under two theories: (1) the warrant is overly broad, and (2) the warrant is in violation of Rule 41 of the Federal Rules of Criminal Procedure.

A key argument for challenging the validity of the NIT warrant is that it was overly broad. Specifically, legal opponents point out that the NIT warrant enabled the FBI to deploy its payload (i.e. hack) to any “activating computer,” which would be any computer that logged on the target site. That means that the warrant did not specify exactly which computers would be searched, to whom they belonged to, or even where the systems were physically located. Thousands of users visited Playpen during the two-week period that the FBI maintained control of the site, and those users were located all over the world.⁴⁴

In an amicus brief filed against the NIT warrant used in Operation Pacifier, the Electronic Frontier Foundation (EFF) argued that the warrant was unconstitutional and stated:

“The Warrant here did not identify any particular person to search or seize. Nor did it identify any specific user of the targeted website. It did not even attempt to describe any series or group of particular users. Similarly, the Warrant failed to identify any particular device to be searched, or even a particular type

of device. . . . Compounding matters, the Warrant failed to provide any specificity about the place to be searched — the location of the “activating computers.”⁴⁵

Attorneys for defendant Alex Levin argued in the District of Massachusetts that the warrant issued in the Eastern District of Virginia was overly broad and fundamentally flawed.⁴⁶ One defense attorney argued that the NIT warrant “effectively authorize[d] an unlimited number of searches, against unidentified targets, anywhere in the world.”⁴⁷ Judge William G. Young of the District of Massachusetts agreed with Levin’s defense and excluded all of the evidence gathered by the use of the NIT.⁴⁸ He stated, “Based on the foregoing analysis, the Court concludes that the NIT warrant was issued without jurisdiction and thus was void *ab initio*. It follows that the resulting search was conducted as though there were no warrant at all.”⁴⁹ Despite Judge Young’s ruling, judges of Playpen cases proceeding in other jurisdictions have not yet applied similar reasoning.

In addition to the claim that the NIT warrant was unconstitutional, defendants have also argued that the warrant violated Rule 41 of the Federal Rules of Criminal Procedure.⁵⁰ Rule 41 authorizes magistrate judges, with few exceptions, to issue search warrants only in the judge’s own judicial district. The “territorial” requirement helps to protect against law enforcement seeking out a sympathetic judge, who has no connection to the judicial district, in order to obtain search warrants.⁵¹

Opponents of the NIT warrant argued that the magistrate judge who granted the warrant in the Eastern District of Virginia violated the Rule 41 territorial requirement by authorizing a search of any com-

⁴³ *United States v. Levin*, NO. 15-10271-WGY, 2016 WL 2596010 (D. Mass. May 5, 2016) (order suppressing evidence).

⁴⁴ Andrew Crocker, *Why the Warrant to Hack in the Playpen Case Was an Unconstitutional General Warrant*, ELECTRONIC FRONTIER FOUNDATION (Sep. 28, 2016), <https://www.eff.org/deeplinks/2016/09/why-warrant-hack-playpen-case-was-unconstitutional-general-warrant>.

⁴⁵ *Id.*

⁴⁶ Joseph Cox, *In a First, Judge Throws Out Evidence Obtained from FBI Malware*, MOTHERBOARD (Apr. 20, 2016), <https://motherboard.vice.com/read/in-a-first-judge-throws-out-evidence-obtained-from-fbi-malware>.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ See FED. R. CRIM. P. 41.

⁵¹ Mark Rumold, *The Playpen Story: Rule 41 and Global Hacking Warrants*, ELECTRONIC FRONTIER FOUNDATION (Sep. 26, 2016), <https://www.eff.org/deeplinks/2016/08/illegal-playpen-story-rule-41-and-global-hacking-warrants>.

puter that accessed Playpen.⁵² Prior to obtaining the warrant and deploying the NIT, the FBI would not have been able to determine the locations of users accessing Playpen via the Tor browser.⁵³ Thus, since the FBI was unable to determine where the search would take place (or at least the judicial district), opponents argued that the warrant ran afoul of Rule 41.⁵⁴

In April of 2016, the Supreme Court approved a change to the existing Rule 41 that would allow federal judges to issue search warrants that target computers outside their judicial district.⁵⁵ A panel of federal judges drafted the new version of the rule at the request of the Department of Justice, and Chief Justice Roberts submitted the rule to Congress as part of the Court's annual amendments to the Federal Rules of Criminal Procedure.⁵⁶ The change to Rule 41 would permit a magistrate judge to issue a warrant, like the Operation Pacifier NIT warrant, to hack into computers and seize data outside the judge's jurisdiction when the computer's physical location "has been concealed through technical means."⁵⁷

PART 3—DATA-MINING AND THE DARK WEB

The vast quantity of data on the internet frequently challenges investigators trying to find information relevant to an investigation. Investigators face an even greater challenge on the dark web, where information on criminal enterprises is located in obscure advertisements or on hidden service websites. However, one new data-mining toolkit, called Memex, is enabling investigators to find critical information. Some investigators are already utilizing this new toolkit to combat

human trafficking on the dark web.

What is MEMEX?

Anonymity on the dark web enables a wide range of criminal activities to flourish. Human trafficking is one illegal activity that takes advantage of anonymous buying and selling on the dark web's hidden service web sites.⁵⁸ Even a human trafficker still needs to tell potential customers how to find his hidden site, though.⁵⁹ As discussed above, web sites on the dark web are not indexed by the major search engines, so the illicit sites would not show up in the results of a Google search.⁶⁰ To drive traffic, human traffickers on the dark web often use one-off advertisements in social posts and chat rooms that usually only contain photos and code words commonly associated with the sex trade.⁶¹ This advertising tactic makes it very difficult for law enforcement to find and track individuals engaged in human trafficking.⁶²

However, one program manager at the Defense Advanced Research Projects Agency (DARPA)⁶³ came up with a way to make it easier to find human traffickers on the dark web.⁶⁴ Chris White, a program manager at DARPA, had experience building tools for mining big data and visualizing the results while supporting the military in Afghanistan.⁶⁵ He later used that experience to lead a project at DARPA aimed at building a suite of search-engine tools that would enable users [e.g. law enforcement] to find, interact with, and understand data available on the surface web, deep web, and dark web.⁶⁶ White and his team called this suite of applications Memex, a combination of "memory" and "index."⁶⁷

DARPA decided to test Memex by giving it to cer-

⁵² *Id.*

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ Matt Ford, *The Supreme Court Expands FBI Hacking Powers*, THE ATLANTIC (Apr. 29, 2016), <http://www.theatlantic.com/politics/archive/2016/04/supreme-court-fbi-hacking/480498/>.

⁵⁶ *Id.*

⁵⁷ *Id.* The new rule will go into effect on December 1, 2016 unless Congress passes legislation to override the proposed change by the Court. *See id.*

⁵⁸ Charles Graeber, *The Man Who Lit the Dark Web*, POPULAR SCIENCE (Aug. 30, 2016), <http://www.popsci.com/man-who-lit-dark-web>.

⁵⁹ *Id.*

⁶⁰ *See supra* Part I (A).

⁶¹ Graeber, *supra* note 66.

⁶² *Id.*

⁶³ DARPA is part of the Department of Defense. The organization's mission is "to make pivotal investments in breakthrough technologies for national security." DEFENSE ADVANCED RESEARCH PROJECTS AGENCY, <http://www.darpa.mil/about-us/about-darpa>.

⁶⁴ Graeber, *supra* note 66.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

tain law enforcement agencies to combat human trafficking.⁶⁸ Many parts of the Memex suite of tools have direct applications to help investigators find sex traffickers. One of the first tools utilized by law enforcement was called “Datawake.” Although the functions of Datawake have since been absorbed into other Memex tools, the program originally helped law enforcement to find and organize relevant data from an otherwise overwhelming amount of data. For example, a law enforcement officer may have had an email address or

After seeing the results in Datawake, officers were able to see other names, phone numbers, or photos that repeatedly link to the original email or phone number.

phone number for a known prostitute. A standard Google search of that one email or phone number would likely result in thousands of hits, and almost all of those hits would be irrelevant. Looking through all of the thousands of search results in order to find a few useful tips would overwhelm investigators.⁶⁹

However, the same law enforcement officer was able to use Datawake to search through all of those same Google results and organize it visually with different lines and circles showing the connections between different pieces of information. After seeing the results in Datawake, officers were able to see other names, phone numbers, or photos that repeatedly link to the original email or phone number. These connections, in turn, greatly aided law enforcement to pursue relevant leads

without getting lost in a sea of data. Datawake also enabled investigators to review prior cases and search the phone numbers, emails, and addresses used as evidence in sex crime prosecutions. The tool even revealed additional information that helped build new cases of criminal conspiracy by linking individuals already in prison to existing human trafficking operations.⁷⁰

“TellFinder” is a very useful current program in the Memex toolkit. Tellfinder retrieves co-referenced information from sex ads on the internet and organizes the commonalities. By examining these commonalities in the ads, investigators are able to identify groups that are likely by the same author. As an example, a law enforcement officer could pull hundreds of thousands of current sex ads from the internet and TellFinder would populate them as bubbles on a map display of the U.S. Once displayed, the officer could then zoom in on a particular jurisdiction and then scroll to show how the sex ads were posted over time. The map display also shows common pieces of information in the ads (e.g. phone numbers, emails, and addresses), and the program even has the capability to recognize photos that contain the same background. Additionally, the officer could also track the sex ads for a particular woman over time as a way to identify the track of how she was being trafficked around the country.⁷¹

“Dig” is another very useful tool that takes that co-referenced information pulled by TellFinder and sorts it into a very organized list — a list similar to one you would get from a search on Amazon. Dig displays different categories and key terms along the side of the results, so an investigator can further hone and filter searches. Dig also has the ability to perform some even more advanced photo commonality searches than in TellFinder.⁷²

Finally, “Aperture Tiles” is another powerful tool that “makes formerly unmanageable amounts of information — think billions of moving data points on a map — manageable.”⁷³ As an example, Aperture Tiles

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.*

can compare the addresses associated with the sex trade (e.g. certain motels) with the location information associated with social media posts. Many posters are unaware that the location feature of an application is enabled, providing valuable geographic information on where a particular sex ad was actually posted. By analyzing this data through Aperture Tiles, law enforcement officers can identify patterns of how sex traffickers are moving around a particular city. The tool can also help to identify how certain traffickers operate in one city for a few days before moving on to a new location. Law enforcement can even use the tool to show an international nexus, as Aperture Tiles has demonstrated that some known traffickers are frequently located in Southeast Asia.⁷⁴

How Have Prosecutors Used Memex to Prosecute Human Traffickers?

The DARPA team, which began testing Memex with law enforcement in 2014, has continued to introduce the platform to district attorney's offices, law enforcement, and non-governmental organizations (NGOs).⁷⁵ The New York Police Department and Manhattan District Attorney's Office's (DANY) Human Trafficking Response Unit have employed Memex, since January 2014.⁷⁶ Today, DANY uses Memex in every human trafficking case, and investigators screened 4,752 potential cases in the first six months of 2016.⁷⁷ Manhattan District Attorney Cyrus Vance described his office's use of Memex:

"We cannot rely on traumatized victims alone to testify in these complex cases. When sex traffickers create online ads for their victims' sexual services, they leave a digital footprint that leads us to their criminal activity. Because

those ads are frequently removed or intentionally hidden on the 'dark web,' it puts them beyond the reach of typical search engines, and therefore, beyond the reach of law enforcement. With technology like Memex, we are better able to serve trafficking victims and build strong cases against their traffickers."⁷⁸

One early case, the prosecution of Benjamin Gaston, helped to show the benefits of Memex to DANY.⁷⁹ Gaston found a woman advertising sexual services online, kidnapped her, and then forced her to earn money for him by having sex with other men.⁸⁰ After two days and numerous sexual assaults, the victim "attempted to escape from the sixth-floor window of the room where she was being held, falling more than 50 feet to the ground, breaking multiple bones."⁸¹ DANY was able to verify the victim's testimony by conducting Memex searches for advertisements with her photo on the dark web. Utilizing the information from the Memex queries, prosecutors were able to establish a timeline that confirmed the victim's statements and strengthened the case. Gaston later received a sentence of 50-years-to-life in state prison.⁸²

The case of Froilan Rosado also highlights the success of Memex in DANY. Law enforcement began investigating Rosado in 2014 after picking up an 18-year-old prostitute in a sting operation. The prostitute told police that she had previously been kicked out of her foster home and had nowhere to go. Rosado had taken her in and then began pimping her out. Rosado, investigators would discover, was an expert at luring girls over social media, some as young as 15. He then used drugs and violence to keep them in the sex trade.⁸³ Prosecutors wanted to build a strong case against Rosado, but they did not know the names, phone

⁷⁴ *Id.*

⁷⁵ Larry Greenemeier, *Human Traffickers Caught on Hidden Internet*, SCIENTIFIC AMERICAN (Feb. 8, 2015), <https://www.scientificamerican.com/article/human-traffickers-caught-on-hidden-internet/>.

⁷⁶ NEW YORK COUNTY DISTRICT ATTORNEY'S OFFICE, MANHATTAN DISTRICT ATTORNEY'S OFFICE APPLIES INNOVATIVE TECHNOLOGY TO SCAN THE "DARK WEB" IN THE FIGHT AGAINST HUMAN TRAFFICKING (Feb. 9, 2015), <http://manhattanda.org/press-release/manhattan-district-attorney's-office-applies-innovative-technology-scan-“dark-web”-fig.>

⁷⁷ Graeber, *supra* note 66.

⁷⁸ NEW YORK COUNTY DISTRICT ATTORNEY'S OFFICE, *supra* note 104.

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.*

numbers, or whereabouts of his other victims. This was especially difficult because Rosado frequently changed the online advertisements for the girls he trafficked. He also changed the girls' names and utilized pre-paid, disposable cell phones (i.e. burner phones). All these details made it difficult for investigators to tie Rosado to a larger prostitution ring.⁸⁴

Investigators then utilized the Memex tools Dig and TellFinder to mine information about Rosado's deleted and current sex ads. The search results linked photos, names, emails, phone numbers, and previously unknown victims.

Investigators were even able to take new phone numbers mentioned over the phone by Rosado (who was still running his sex trafficking ring while awaiting trial at Rikers Island) and search for even more new connections in Memex. Investigators were eventually able to link Rosado to a prostitution ring of 10 teenagers ranging from 15 to 18 years old. On September 15, 2015, Rosado received a sentence of 7-to-14 years in prison after guilty verdicts for all of the charges against him: one count of Sex Trafficking, and two counts of Promoting Prostitution in the Third Degree.⁸⁵

CONCLUSION

The dark web provides a high-degree of anonymity to users, including criminals engaging in illicit activities. In the case of Operation Pacifier, the FBI skillfully gained control of the Playpen server before employing an NIT. This novel approach to identifying individuals who access child pornography on the dark web also raised new challenges from the defense bar. However, the use of NITs to combat criminal behavior on the dark web will likely increase. The revised version of Rule 41 went into effect on December 1, 2016 and will aid law enforcement in obtaining warrants for NITs. State and local investigators may also employ NITs as departments gain the required technical expertise.

Additionally, Memex and other dark web data-mining tools will continue to proliferate within the law enforcement community. These platforms provide powerful ways to sift through large volumes of information and provide links of criminals trafficking humans on the dark web. Traditional law enforcement techniques, such as undercover or surveillance operations, still serve an important part in combatting crime on the dark web. However, increasingly, investigators and prosecutors may need to turn to cutting-edge technology in order to identify suspects, build cases, and prosecute dark web criminals.

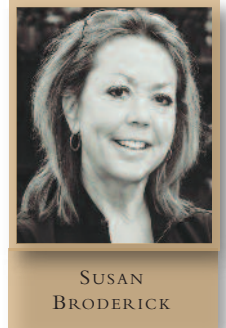
⁸⁴ *Id.*

⁸⁵ NEW YORK COUNTY DISTRICT ATTORNEY'S OFFICE, DA VANCE: FROILAN ROSADO SENTENCED TO 7-TO-14 YEARS FOR PROSTITUTING TEENAGE GIRLS (Sep. 15, 2015), <http://manhattanada.org/press-release/da-vance-froilan-rosado-sentenced-7-14-years-prostituting-teenage-girls>.

The PROSECUTOR

Love, Hope, and Random Drug Testing: “Radical” Strategies for Turning Lives Around

BY SUSAN BRODERICK, JD



THE NATION is in the midst of the worst addiction crisis in its history. The Center for Disease Control’s most recent report revealed that the rate of drug overdose deaths has increased 137% since 2000, including a 200% increase involving opioids (CDC 2016). People are cycling in and out of treatment and both families and communities are desperate to find new ways to respond to the crisis.

While some argue that we can’t arrest our way out of this epidemic, I truly believe that the justice system plays a critical role in how we respond to it. As a former prosecutor, I know that a referral to the justice system can be a motivating force to initiate change. As a woman in long-term recovery, I also know that very often change can be sustained by offering people hope and positive support.

My recommendation is a simple, yet important one: use the leverage of the justice system to turn lives around and get people back on track, not destroy their lives.

Given the crime and public safety concerns generated by compulsive addictive behaviors, the justice system will play a role in responding to this epidemic and I believe it can actually play a transformative role in helping to alleviate this crisis. It can provide the unique leverage and access to treatment that can mark the beginning of recovery. In fact, research confirms the criminal justice system can serve as the motivational fulcrum that can aid treatment retention, improve rates of remission, and decrease relapse and re-arrest over the long-term (Kelly, Finney, Moos, 2005).

Anyone recovering from an alcohol or drug addiction will tell you that they didn’t make the decision to get sober because their life was great. They made the decision because of consequences and/or negative outcomes associated with their use. Very often an arrest or referral to court will be the

“bottom” for many individuals with an alcohol or other drug use disorder that will initiate a willingness to change. Research has confirmed that the most common reason cited for getting sober was “escalating negative consequences” (Laudet, 2007).

What we need to do is to work with those in the justice system to make sure we are doing all that we can to *sustain* that motivation to change. How do we do this? While there is no single answer, an important component involves providing those on the front lines with a greater understanding of the true nature of addiction and how to best prevent, intervene and support recovery from the disease. The concept of recovery is still relatively unknown to those in the justice system, yet it is a critical component in reducing recidivism.

Over the past twenty years, there have been significant advances in the science surrounding addiction and recovery. Studies have confirmed that addiction is a chronic, yet preventable and treatable disease. Last year the groundbreaking report on “Facing Addiction in America: The Surgeon General’s Report on Alcohol, Drugs and Health” (U.S. Department of Health and Human Services (HHS 2016) highlighted the most recent science and best practices across the entire spectrum — from prevention through recovery support. Given the current epidemic, it is imperative that stakeholders across the justice systems are well educated and trained on these latest findings.

Current efforts to try to initiate and enforce abstinence need to be supported and expanded. During the diversion period or pendency of a court case, conditions such as randomized drug testing can be effective incentives to encourage people to not use drugs or alcohol. Programs such as

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HOPE Probation and South Dakota's 24/7 have shown great success in the criminal justice field in both reducing substance use and offending through the use of randomized drug testing (DuPont, 2017).

But drug testing and monitoring are not enough. If we truly want to turn a life around, we must recognize that people need a reason to believe that things can change for the better. Consequences may help initiate change, but in order to sustain change there must be a belief that staying abstinent will be worth the struggle it entails and provide positive incentives for recovery (McKay, 2016).

Providing "alternative re-enforcers" are crucial — rewarding things that a person can do to compete with and replace activities associated with drug use (Volkov, 2011). When drugs and alcohol are taken out of someone's life, the void must be filled or there will be a return to the drugs and alcohol.

One way to fill that gap is with involvement with a recovery-supportive peer network. The importance of connecting with others who have been through the same "crisis" and are now on the other side cannot be overstated. Nothing offers greater hope or resilience than seeing someone who has overcome exactly what you are struggling with.

I learned the importance of peers first hand when I made the decision to get sober. I also learned it from my two bouts with breast cancer. In each of those experiences, it wasn't doctors or professionals who strengthened my resolve, it was the love and support I received from others who had been through it. Survivors told me I could do it too and as living proof, I believed them.

Research confirms that there is a transformative power inherent in hope and other positive emotions (Vaillant, 2008). With all of the pessimism and stigma surrounding addiction, it's time to change the focus to emphasize the positive possibilities of recovery. In fact, studies have shown that those individuals in recovery often experience a "better than well" effect, in which they find a greater sense of joy and hope in their recovery journey (Hibbert and Best, 2011).

This is not only true with regard to recovery from addiction, but with desistance from offending. The emerging field of "Positive Criminology" centers on the concept that growth and positive change can be a direct result of negative experiences such as arrest and addiction (Ronel and Elisha, 2011). Very often an adverse experience can actually become the turning point for a new way of life (Best, 2012). Both desistance from offending and recovery from addiction are associated with positive life influences that enable the growth of personal and social strengths (Best and Aston, 2015).

Last month I attended the National Association of Drug

Court Professionals (NADCP) annual training conference. With over 5,000 attendees, it is one of the most respected and well-attended conferences for those working on the front lines and dealing with substance use and justice issues. In past years, many of the presentations centered on and around treatment, but this year things were different. There was a palpable shift and the concept of "recovery" was featured throughout the panel discussions, workshops and presentations.

I have believed that we are on the verge of a "Recovery Revolution" for quite some time and after attending this year's NADCP's conference I am more convinced than ever. The opioid epidemic has (in many ways) created the perfect storm for the emergence of this movement.

The front page headlines of overdose deaths and the adversity caused by this epidemic are giving way to the recognition of just how pivotal the concept of recovery is. Interestingly, this further confirms what the proponents of Positive Criminology espouse: growth and positive change can be the result of negative experiences. The love and hope that surround recovery are being recognized as not just nice to have, but critical components of staying alive.

It's time we start talking about this revolution.

- Best, D. and Aston, E. 'Long term recovery from addiction: Criminal justice involvement and positive criminology', In Ronel, N. and Seger, D. (eds) *Positive Criminology*, Routledge Frontiers of Criminal Justice, 23:177-193. (2015)
- DuPont, R., *Brain Research Bulletin* (2017), <http://dx.doi.org/10.1016/j.brainresbull.2017.06.008>
- Hibbert, L. and Best, D. 'Assessing recovery and functioning in former problem drinkers at different stages of their recovery journeys', *Drug and Alcohol Review* 30: 12-20. (2011)
- Kelly, J.E.; Finney, J.W.; and Moos, R. Substance use disorder patients who are mandated to treatment: Characteristics, treatment process, and 1- and 5-year outcomes. *Journal of Substance Abuse Treatment* 28(3):213-223, 2005. [Abstract]
- Laudet, A., Savage, R., Mahmood, D. 'Pathways to Long-Term Recovery: A Preliminary Investigation', *J Psychoactive Drugs*. 2007; 34(3): 305-311.
- McKay, J.R., 'Making the Hard Work of Recovery More Attractive For Those With Substance Use Disorders', *Addiction*, 2016: 112, 751-757. (2016)
- Ronel, N/ and Elisha, E. "A different perspective: Introducing Positive Criminology", *International Journal of Offender Therapy and Comparative Criminology*, 55 (2): 305-325 (2011).
- U.S. Department of Health and Human Services (HHS) Office of the Surgeon General, 2016. "Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs and Health"
- Vaillant, G. and Hiller-Sturmhigel "The Natural History of Alcoholism" *Alcohol, Health and Research World*, Vol.20, No.3 (1996)
- Vaillant, G. "Spiritual Evolution: How We Are Wired for Faith, Hope and Love" Broadway Books, (2008)
- Volkow, N. D., Baler, R. D., & Goldstein, R. Z. (2011). Addiction: Pulling at the Neural Threads of Social Behaviors. *Neuron*, 69(4), 599-602. <http://doi.org/10.1016/j.neuron.2011.01.027>

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