

Just Preventing Contraband In Corrections With Technology

Intro [00:00:01] RTI international's Justice Practice Area presents Just Science.

Intro [00:00:09] Welcome to Just Science, a podcast for justice professionals and anyone interested in learning more about forensic science, innovative technology, current research, and actionable strategies to improve the criminal justice system. In episode three of our Innovations and Correction Season, Just Science sat down with Todd Craig, retired acting assistant director for the Federal Bureau of Prisons, and Neal Parsons, research scientist and project manager at RTI International, to discuss how technological advancements can help correctional officers prevent the introduction of contraband into jails and prisons. For correctional officers, preventing contraband from entering jails and prisons is a top priority, as it can present a security threat to inmates and staff. To assist officers in their prevention efforts, researchers and practitioners are working together to implement technological solutions that can help keep contraband, such as cell phones, weapons, and controlled substances out of correctional facilities. Listen along as Todd and Neal describe common ways that contraband enters a jail or prison. How researchers are developing technology to keep up with new contraband threats, and important logistical considerations when implementing these technologies. This episode is funded by RTI International's Justice Practice Area. Some content in this podcast may be considered sensitive and may evoke emotional responses or may not be appropriate for younger audiences. Here's your host Peyton Scalise.

Peyton Scalise [00:01:21] Hello and welcome to Just Science. I'm your host, Peyton Scalise with RTI's Justice Practice Area. Today, our topic will be understanding technology to identify contraband in correctional facilities. Contraband smuggling has long plagued correctional facilities, posing serious threats to both inmate safety and institutional security. These items not only fuel violence, but also undermine rehabilitation efforts. Joining us today is Todd Craig and Neal Parsons. Todd Craig is a correctional contraband interdiction subject matter expert with 35 years of experience in public safety. While working for the Federal Bureau of Prisons, Mr. Craig developed and deployed the first nationwide contraband interdiction systems for the Bureau of Prisons, implementing a multi-layered security defense model, facial recognition, and contraband cell phone interdiction technologies. Neal Parsons is a research scientist and project manager at RTI. His career experience includes supporting operational research and initiatives for the US military, intelligence and law enforcement communities. Neal is the research, testing and evaluation Task Lead for the Criminal Justice Technology Testing and Evaluation Center, also known as CJ tech, which is a program of the National Institute of Justice. Welcome, Todd and Neal.

Todd Craig [00:02:31] Thank you for having us, Peyton.

Peyton Scalise [00:02:33] Let's start by defining the scope of the problem. What types of contraband are commonly smuggled into prisons, and how does this impact the facility's operations?

Todd Craig [00:02:41] Contraband always has been and will be the main security vulnerability to any of America's over 3500 federal, state, local, military, territorial, and tribal jails and prisons across this country. Contraband ranges everything from illegal cellphone, a SIM card, synthetic and opioid drugs, weapons in most states and federal jails and prisons across this country prohibit all these items for common sense reasons, as well as institutional security law enforcement policy, because it put the lives of not just the

correctional officers serving on the front lines, the adults in custody in danger, but ultimately the public safety. And when I started chasing drugs, drones and phones, as I call it, the threat continues to evolve, just like synthetic drugs. I mean, 35, 36 years ago, when I started my career, black tar heroin was pretty easy to identify coming in the mail in the prison. Well, today, not so much because of the advances of the cartels and drug organizations able to soak alternate pages of postal and legal mail with synthetic drugs such as fentanyl, fentanyl analogs, literally printing these drugs, either using a printer or soaking it. What happens when that contraband gets in? It fuels the underground economy. When inmates can't pay their debts, they get stabbed or killed. Inmates smoke it, overdose, assault one another or assault correctional staff. So, the threat is always evolving, and that's why it's so important that operators, practitioners stay informed not just of the technology that's out there, because a lot of it is not vetted. It is not been proven outside of laboratory. It's not been proven in the ruggedized environment of a high security or medium security prison. You've got the boots on the ground folks need to really pay attention to the operational researcher, such as my good friend Neal, who are doing as much as they can real time operational research to inform the decision making on what technology works. Does it fit law and policy? Is it practical for the officers to use it? Will the officers use it?

Peyton Scalise [00:04:45] Thank you Todd. Given the severity of these challenges, what role did technological solutions play in addressing contraband smuggling?

Todd Craig [00:04:52] Security technologies augment the work that correctional officers do every day, but corrections will always remain committed. Law enforcement professionals managing difficult people and adults in custody have 24/7 365 a year to figure out a way around every countermeasure that a correctional agency may put in place. For example, you cut off the conduit synthetic opioid drugs being smuggled in on the person, whether that is the inmate, when he gets off the bus, goes through a whole-body imaging device and drugs secreted in the body orifice or detected or at the checkpoint, a contractor visitor trying to bring it in, but it's detected through metal detection. The pilot baggage scanner picks up the organic thread that there are drugs in their personal possessions they're bringing in. That technology helps but cannot replace the officer supervising inmates. And I think we're getting into an era where, at least in the free world, you know, we think artificial intelligence can solve all the problems. It can certainly augment some of these technologies. And we'll talk about its role here in a little bit. But there's a real danger of relying simply on the security technology solutions without giving deference and incorporating the correctional officer in the loop and making sure they know the technology, they know how to use it as an effective tool in the toolbox to not just stop contraband, but ultimately protect life.

Neal Parsons [00:06:18] Yeah, Todd. You know, I think with the new technologies. So as in any market, you know, there's an evolving technology market out there where there's promising innovations that are coming to fruition on a regular basis. As far as augmenting the corrections staff, you said it before stopping the entry of contraband at the point of entry. Right. And to do that, I think using, you know, novel technologies such as transfusion X-ray machines, paramagnetic detection devices, and obviously, metal detection scanners, those types of technologies go a long way in detecting contraband coming in the front door. But as you mentioned earlier, once you stop that one route of drug introduction, it seems like the inmates and their collaborators outside of the prison community actually find a new route to introduce contraband. And whether that's drones, whether that's a mail route. And so, all these various pathways of contraband introduction

need to be assessed and would provide a multi-layered, holistic approach, for it to be effective.

Todd Craig [00:07:22] That's a great point Neal. Particularly given the reduced staffing augmentation, demands that the correctional officers on the front lines face every day. If you have an effective checkpoint system at the front for visitors, staff and contractors, an effective whole-body imaging and metal detection system throughout the facility to identify principally metal weapons, but also organic drugs coming in the whole-body imager. Then the inmates move to another conduit, as you said. And that is the basis to the great uptick. And I think it's a perfect case in point, of drones dropping contraband into federal, state and local prisons. It started out as contraband cell phones and SIM cards moved to synthetic drugs. And now in a couple of the incidents with state prisons is actually escape paraphernalia, escape tools. And it just be a matter of time, in my opinion, before it's a weapon or an improvised device or something that could really cause significant loss of life. So, you put a countermeasure in, the inmates move and their criminal associates on the streets move to the next conduit because it's all about control of the underground economy. It's all about control in prison. And what cartel or gang is running not just one block, but ultimately the yard.

Speaker 4 [00:08:37] Yeah, just in a recent news report, actually February 2024. So just a couple weeks ago, there were 11 suspects arrested in a West Virginia Correctional Facility, and they were actually under investigation for delivering contraband via drone. So, this was a great arrest, but obviously this is being done all over the country. Both federal and state, local prisons are having issues with the drones, how they mitigate the threat of drones delivering contraband as a multilayered, dynamic situation that requires both technology requires staff to be trained on these technologies, and then it requires boots on the ground because the drones are coming in. It's one thing to stop the contraband as it's in the facility, but you need to essentially stop the root cause right next is arresting the people on the outside that are bringing drugs in.

Todd Craig [00:09:29] As well as holding the inmate ringleaders accountable and arresting them as well inside. So, it's a multi-pronged approach, but I think drones and the counter drone technology is a case in point and a real foundation for the whole podcast. To get to that news article you talked about, which is an ongoing investigation. They've made the arrests, and all I can say is my former colleagues from the Federal Bureau of Prisons played a significant role in that as part of a program, I stood up before I left that agency. But let's go back ten years. We were trying to get a law passed to protect and its nation form DOJ and DHS facilities inside United States. 2016, 2017 were not successful with Congress. 2018 when you get the Emerging Threats Act passed after many classified unclassified briefings, whole of government approach from DHS and DOJ, which gave them the authorities to detect and mitigate drones, as you were talking about, Neal. So, the law gets passed. Now what, federal correctional officers are authorized to detect and take down drones. But how did that work? Well, the department developed ag guidance on counter drone, all five law enforcement components. I was part of that. They stood up a testing group called CoTech for testing and evaluation purposes of new drone technologies. And I was privileged to lead the major test of that in the fall of 2020. For all major vendors, it wasn't just DOJ and DHS components, it was DoD, the IC. It was probably the most comprehensive U.S. government test, done on counter drone technologies. But I know there's been a follow-on work that you're involved in that. And I'm glad to see that testing continues. So, you got tested, you got validated. And I think this really gets to the crux of the thing. There has to be a nexus between the threat, the correctional officers and wardens, what technology they're looking at to purchase and the

vetting of that technology. Does it work? Is it reliable? Does it need policy? Does it need law? And the big thing is getting funding. And that's something that is a corrections is at the end of the criminal justice funding funnel. Always has been always will be. Resources are dedicated to front line police officers, federal agents, prosecutors. Nobody thinks about who deals with the convicted serious and violent criminals 24/7 after they are sent to prison. So it was a multi-year process of making budget request, defending those budget requests to main justice for the Bureau of Prisons Office of Management and Budget over to the appropriations committees in the House and Senate to actually get a budget baked into the Bureau of Prisons for them to stand up a counter drone program that used, tested, and validated technologies that met law and policy requirements that resulted in the news article you brought up, Neal. Where now, almost eight, nine years later, because of all these steps that had to be taken, there's effective program in place, including the federal government working with its local law enforcement partner, the county sheriff there in McDowell County. And we want to give that sheriff a shout out, because just from public reporting, he was very supportive of the federal effort, and it results in taking the bad guys down, stopping the threat and protecting life inside FCI McDowell. So that's a long-winded answer. There's a whole process. Is it legal? Can you get funding? Is it supported? But that's what it takes.

Neal Parsons [00:12:41] You know, in implementing these technologies is a whole another layer of complexity. You know, depending on the site, the systems may need to be fine-tuned for specific operational areas. Not every prison is the same, you know, whether it's in a very rural location or semi-rural location or even in an urban area. These technologies are going to actually operate differently in this space. So, it's really important for not only the testing to happen to vet the capabilities of these technologies, but also to see and vet these technologies within specific environments that can actually, demonstrate their utility for the operators and inside personnel.

Todd Craig [00:13:19] Absolutely. Like with contraband cell phones, when you're deploying technology to defeat contraband cell phones, the radio frequency propagation map in a dense urban environment, for example, for a high rise jail, makes it almost impossible, along with coordinating with the local jurisdictions and getting approval compared to a rural medium or high security prison out on the plain somewhere where you might have 1 or 2 cell towers, there's nothing else out there, and it'd be relatively easy to get the authority to deploy technology to interdict contraband cell phones. So, you're right on point.

Peyton Scalise [00:13:54] So it's clear that these technologies hold tremendous potential in bolstering security measures within correctional facilities. Are there any other innovative solutions that are making an impact in this space? I know you guys touched on it a little bit, but for example, artificial intelligence.

Todd Craig [00:14:09] That's a good point, Peyton, and thank you for raising that question. Artificial intelligence. We need to define what that means. I think AI holds promise and a great threat for correctional facilities. AI is being used for threat identification, for example, on baggage scanners and other things to really catch what the correctional officer might miss. AI could also be used. There's some models now being used for foreign language translation. Which prisons do record phone calls, they are legally authorized to do so. There's no Fourth Amendment right against search and seizure, and that's for A internal security and B for coordinating with outside law enforcement, criminal prosecutions of illicit criminal conduct. AI has that promise of making the technologies not just more efficient but proving the efficacy of the technologies and

threat identification and cueing that up for the correctional officer operator to identify. The dark side of AI is the ability to spoof, mimic, deepfake. All kinds of identity management technology that's coming out. And right now, one of the best promises is working with identity management companies to really vet visitors, family, friends and unfortunately, criminal associates in some cases of inmates incarcerated to do a much better job of validating their identities almost on a real ID basis, because visitors have always gone through a background check. But there's a whole new level, given the rise of artificial intelligence to mimic data and do all these things.

Peyton Scalise [00:15:44] So can you both speak a little bit about how research is contributing to the adoption of technology in corrections, and what is required to ensure implemented solutions are successful in real world settings?

Neal Parsons [00:15:55] I mean, we touched on this earlier. It's really important for technology to be properly vetted. You know, I think the decision-making correctional staff who are looking into technologies, with the amount of technology that is out there. Anywhere from, you know, body scanning to drug detection to drone detection to digital mail solutions. And when you package all that up, it becomes an enormous task to be able to vet that. As Todd already mentioned, there's already been, you know, reductions in staff throughout the country in these correctional facilities. So, to require them to actually vet these technologies on their own is a daunting task. So, for RTI purposes, and what we've been doing is actually looking at these technologies, putting them through a rigorous testing and evaluation program and ensuring that they're capable, that they are valid to be used in production facility. And our goal is to not only test it in a clean, sterile environment to make sure that it functions properly, but also to have a part of the study where the systems are actually employed onto a active correctional facility to understand how the system works. Is it going to break easily after, you know, professional staff start working with it. So, usability factors also come into play here because some of these technologies are very complex. It takes a lot of training. So, implementation of these technologies so it's in the system is a daunting task. So, look at all those factors. Not only is it functioning correctly and it's effective but is it really something that is going to be used. Is it going to become, you know, paperweight within the correctional facility? Is it too complex for the staff to use on a regular basis? Does it create false positives? Does it slow things down? And if it does slow things down is there a trade off? If it slows things down but it's really increasing the capability of detecting contraband. You know, you have to weigh the pros and cons with any technology that's coming. So, I think that's how we're looking at it. You know, moving forward with our research is to ensure that technologies, that are being pushed to these correctional facilities and actually have usability.

Todd Craig [00:18:09] Now, that's a great point. I think ultimately, and I know you've done some work in this as well. The unattainable goal and security technology management has been a single pane of glass. In other words, how do you fuse sensors systems together for a single pane of glass command and control view. In the correctional environment that means in the institution control center, because if you walk in the modern control center, we're asking 1 or 2 officers to monitor a plethora of screens, a plethora of alarms, everything from fire alarms, safety doors, cameras instead of an integrated, one integrated command and control, single pane of glass. And at the time when we basically slowed things down at the Department of Justice to do a major test to establish a baseline for components to deploy vetted and tested technologies. I'm the old prison warden. If there's a chance of a working, we're going to deploy that technology and stop the threat and protect life. But there's a real value to slowing it down because there's nothing new under the sun. As King Solomon said, technologies evolve, the threat evolves. But basically,

whether it's whole-body imaging, metal detection, the stuff's been around for years and years. It gets improved. You get AI, you get different, synergies of technologies. But it's, you know, technology is new, but it's not new. So, you have time to test it. You have time to vet it, before it gets deployed to the field. And there's a real utility to that in terms of A investing the taxpayer dollars wisely and B and most importantly, protecting life.

Peyton Scalise [00:19:40] In recent years, there's been a disturbing trend of drug laced mail being sent to inmates, which poses a significant risk not only to the safety and security of prisons, but also to the rehabilitation efforts of those incarcerated. Can you both speak to this issue?

Neal Parsons [00:19:52] What we're looking at here is really substances known as novel psychoactive substances or NPS. So, these substances are opioid analogs. They are different types of stimulants, depressant hallucinogens that can be synthetically made. They're very concentrated, they're highly potent. They're extremely dangerous. They have unknown effects on the body. Some of these are developed in overseas labs. And what they're doing is since these drugs are so highly concentrated that they're able to actually put them in a solution, and then they're actually spraying that solution on a piece of paper, soaking that piece of paper in the solution. And this piece of paper can then be disguised as a piece of mail, whether they actually print on it or type a letter or actually draw have a kid draw something on there that is being sent into the prison. And then that piece of paper is essentially a very valuable, very potent piece of contraband that can be divvied up into many different portions and distributed amongst the inmates. And where they would either ingest or smoke it. These substances have very unpredictable effects, and they have led to a lot of violence within the system and essentially a continuation of drug activity on both inside and outside of prison and gang activity stuff.

Todd Craig [00:21:16] That's a great point, Neal. And I think that drugs and postal mail soaked in postal legal mail is a great case in point. Years ago, the threat was black tar heroin, cocaine, meth being smuggled in the spine of books, packages, sometimes postal mail. But then the threat evolved, as you said, with fentanyl, which we know how deadly that is. Then the analogs and the bad guy chemist changed that compound, typically by one, molecule on a regular basis, which makes A detection and B interdiction of those drugs very, very difficult. And the DEA and others being able to stay ahead of it, classifying those as a schedule one drug. So as that threat continue to evolve and started with fentanyl, fentanyl analogs. And now I read a report just this week, overseas the United Kingdom, the Home Office prison service are dealing with nitazene, which is yet another new compound that's 250 times stronger than heroin. And it's already claimed deaths in the community in Britain, but also a number of deaths, in London. So, if it's there now, it's going to be here soon. And the challenge of technology keeping up with the threat since 2003, it's a matter of public record. The Bureau of Prisons has used an ion scanning device visitors, contractors, volunteers. Basically, it's swab trace, narcotics detection, the individual's hands, belt, other areas are swabbed, top of their shoes for the presence of any the standard time battery of opioid drugs. Then I challenge that company when the threat of synthetic drugs. Almost five years ago, when I did the first pilot in the federal government, actually digitizing mail and keeping mail altogether out of prison. But the threat is evolved and it's going to continue to evolve. And I challenge the ion scan maker, the vendor, to develop a robust synthetic library of synthetic drugs for detection at our front entrance checkpoint. They developed it. Now all the other vendors have followed suit years later, but that library has to be constantly updated to address the threat.

Neal Parsons [00:23:22] Right? And that's the issue whether it's ion mobility, spectroscopy or ROM inspect, or intro inspect. They're all library-based systems. And as these, you know, drugs are newly synthesized in the different analog, it may not be able to be detected vital. And so, we're talking there more about the detection of the drug on piece of paper. Can you speak to how there's programs being put in place to digitize the mail, so that the mail never enters the facility at all, or perhaps gets delayed so it can be tested for drugs?

Todd Craig [00:23:56] Absolutely. I mean, directors of corrections across the states, wardens, I mean, they see the threat this presents to their staff and adults in custody. So, they've tried some interim measures. Back in 2018, the Bureau of Prisons implemented a process of photocopying the mail, regulating what types of postal mail could come in to inmates. Couldn't have scents or be colored. Had to be on white paper. But the problem with that and a lot of states have done it, I call it the photocopying model, where staff you're still dedicating law enforcement professionals to sorting the mail, to copying the mail, to still being exposed to fentanyl, fentanyl analogs, crank, crocodile, now nitazene, all these synthetic compounds, and there are still exposures of those staff going to outside hospitals for treatment. Sometimes some pretty serious treatment for drug exposure. That's just an interim measure. The only way to keep it out today, the only system that has 100% efficacy is to digitize the mail. What does that mean? That means the mail gets sent to a third-party vendor who screens it for not just opioid, but synthetic drugs and all contraband. It then gets digitized and sent back as electronic file to the federal, state or local prison where the inmate can read their mail almost real time and certainly within 24 hours on a kiosk or their tablets.

Neal Parsons [00:25:19] Yes, there are completely digital solutions out there, as well as solutions that are technologies that actually test the mail in real time to discover drugs.

Todd Craig [00:25:28] Let's talk about that. The first thing on digitizing the mail currently there is a bill that's been introduced, House resolution 5266. That will require the Federal Bureau of Prisons to digitize postal and legal mail, to eliminate the threat, almost five years after a successful pilot was conducted by that agency that showed that technology had 100% efficacy. So, things move slow in Washington, but the bill's been introduced. A Senate companion bill is about to be introduced in the Bureau of Prisons will obviously need funding, but get that job done. We have the model of staff copping mail. They're still exposed to drugs and threats. We have the digitized model of no mail ever comes into the institution. And then the third would be testing the mail using another form of technology. Some technologies out there and RTI and even though I am a retired Department of Justice employee. And we're not going to endorse a specific vendor or product on this podcast. But there are different technologies. Some are go, no go. They show an anomaly in the mail when they are scanned. Some break it down for trace narcotics detection, but that is literally a page at a time and running a prison. As a former warden and senior warden is like running a city, a complex city. You've got health services, you got financial services, you got security. The police force. You don't have the resources. For example, although the advent, the rise of email tablets has greatly reduced physical mail coming into prisons. You still get 2 or 3 letter trays a day. Okay. Each of those may have 5 to 10 pages. Okay. Then you have books and packages that are still authorized in most jurisdictions to come into adults in custody. So, you've got 2 or 3 staff already dedicated to your mailroom operation. They're tasked with reading mail, coming in, reading mail, going out for security on top of that, and listening to phone calls on top of that, reading emails for security threats. And now you're going to ask these staff to page by page, go through a scanner. So, nobody, to my knowledge in the market space today has developed a high-

speed scanner with 100% efficacy for a library of both synthetic opioid drugs. I pray one of your listeners calls up RTI and says Craig's all wrong it's out there, but I haven't found it. What? Corrections is typically 10 to 15 years behind the technological advances. When we had the anthrax threat back in the early 2000. What did DoD do? They sent a very complex scanning operation for all mail going into the Pentagon that was digitized to eliminate the threat of anthrax. That was back in the early 2000. Okay. A few years later, Congress decided, hey, that's a pretty good idea. So, they don't read their own mail. So, when I'm on the Hill talking about this legislation, it's pretty easy to say, hey, you get your mail digitized from all your constituents. You respond in a digitized manner. Are the lives of correctional officers and adults in custody any less value? Of course not. Life is precious. So, corrections is always late to the technology game. But in this case, the time for digital mail has come to the advocacy groups out there. The bill 5266 also permits and actually facilitates the delivery of physical mail to the inmate 30 days after they get the digitized copy. But why would you do both? I thought the threat was to eliminate synthetic drugs in the mail. It is. As a former warden and senior warden. Associate warden. Maintaining family ties is critical for two reasons. One, there's something about the physical presence of mail and getting the greeting card from the daughter or son that keeps hope alive, keeps the inmate on the right path, greatly reduces their rates of institutional misconduct, violence, contraband introduction. And then secondly, maintaining a strong family tie, most importantly, facilitates reentry. In other words, if they have a place to live with their family away from their criminal associates that got them in trouble in the first place, and they're able to get a job. Those are the two greatest. The buzzword today is social determinants of health. But social determinants of recidivism and all those factors go into play when, if they maintain family ties, have a safe place to live away from their criminogenic former lifestyle, and they can get a job and hold the job and barriers to that need to be reduced. Just my personal opinion then their chance of coming back to prison is greatly reduced. There are prisons published recidivism rates 35%. They've developed a lot of innovative programs. And Congress passed the First Step Act. And every year, Congress allocates \$409 million for reentry programs. Well, I always argue if the inmate can't take their first steps safely inside the prison walls as an old warden. What makes you think you're going to be able to take their first step into the community? So, it all works together. They've got to have a safe place to do their time. They've got to maintain family ties. Technology and security technologies have a great role to play in making sure the institution environment safe, contraband free.

Neal Parsons [00:30:38] Those are amazing points. One thing I want to note that I think is really important with any digital mail solution, or any sort of communication technology that is instilled or embedded into, a correctional facility, is that in my point of view, it's really important that these digital solutions allow for better access to correspondence with family and friends and doesn't limit, you know, interaction between them, because we all know that having that network of family and loved ones, you know, that are waiting for you to return home. They don't want to lose that correspondence. And it's really important for mental, physical health inmates that they do have that. And so, I think if there's any pushback against digitizing mail, I think as long as that system enables equal or better communication with loved ones, I think it should be employed. These really dangerous drugs are not only destabilizing correctional facilities, but their putting both inmates and staff in, serious harm.

Todd Craig [00:31:39] The first duty of government is to protect life. In the case of digital mail, in the context setting of corrections. You can do both. They're not mutually exclusive. You can digitize it, then provide the physical copy later after tertiary scanning.

Peyton Scalise [00:31:53] It's fascinating to see how technology continues to evolve in addressing complex challenges. Before we conclude, do any of you have final thoughts or insights that you'd like to share with the audience?

Neal Parsons [00:32:03] My final thought is this is that as a scientist, my lenses, we sort of skewed towards the necessary, need for rigorous scientific evaluation technologies, especially prior to the widespread prevalence in deploying within these facilities. I think, you know, as you heard from the discussion, there's this vast array of technology that's out there, whether it's digital mail solutions, you know, x ray technologies, there's counter drone technologies, there's weapons, detection technologies and cell phone technologies, which we didn't even get to touch on today because that is such a basic issue as well for the corrections facility. But I think it's really important that these technologies get vetting. I think it's important for the scientific community to keep pushing the vendors and manufacturers, as well as the branch and staff, to keep pushing these vendors to increase the efficacy of these systems, to ensure that they are robust, and capable of making it into the correctional facilities and institutions, and being effective in lessening the load for the staff members as well as, you know, just as important, if not more important, but preserving that life of both inmates and staff.

Todd Craig [00:33:16] Great summary, Neal. I would just add, there is a nexus and a vital role for the operators in the field in corrections to work with operational researchers such as yourself and RTI. There's a strong nexus there. As a chief of security technology for the Bureau of Prisons, I was required two things right up front. What, technical standards does the technology meet? In other words, does it comply with law and regulation. And second, show me or independent third-party laboratory testing results. In other words, your operational research but has to go beyond that has to go from lab testing or something may work great to boots on the ground in the field testing. I also see the rise of AI as I'm thinking about these technologies. AI is allowing us to develop weapons detection packages, specifically drug detection packages specifically. So, I see the rise of AI on a good sense for corrections, but I also see it is going to present a lot of security vulnerabilities for identity management. Another point, so podcast and the point of our discussion, certainly our partnership over the years, Neal is the warden and the researcher have to work together to make sure the correctional officers on the front line get vetted, cost effective legal security technology to interdict the plethora of threats that present themselves every day in the correctional environment and continue to grow and evolve as technology does.

Peyton Scalise [00:34:42] Todd and Neal, it's been great having you on the podcast today, and I'd like to thank you for taking the time out of your day to chat with me about these important topics. Thank you both so much for joining us today.

Neal Parsons [00:34:51] Absolutely. Thank you, Peyton.

Todd Craig [00:34:53] Thank you Peyton and glad to be here.

Peyton Scalise [00:34:54] I'd also like to thank you, the listener, for tuning in today. If you enjoyed today's conversation, be sure to like and follow Just Science on your podcast platform of choice. I'm Peyton Scalise, and this has been another episode of Just Science.

Outro [00:35:09] Next week, Just Science sits down with Samuel Scaggs to discuss using technology to help remind clients of their probation mandated behavioral health care management appointments. Opinions or points of views expressed in this podcast,

represent a consensus of the authors, and do not necessarily represent the official position or policies of its funding.