Just a Cost Benefit Analysis of Sexual Assault Investigation

Introduction [00:00:05] Now, this is recording, RTI International Center for Forensic Science presents Just Science.

Voiceover [00:00:21] 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 four of our Research and Considerations for Sexual Assault Cases season, Just Science sat down with Dr. Rachel Lovell, Research Assistant Professor at Case Western Reserve University, and Mary Weston, Assistant Prosecuting Attorney at the Cuyahoga County Prosecutor's Office, to discuss a recently published article detailing the case for an "investigate-all" approach to sexual assault kit investigations. As more jurisdictions submit their previously untested sexual assault kits, investigators are finding that many submissions do not result in a CODIS hit. But should investigators continue their efforts, even though there isn't an immediate suspect identified through CODIS? Dr. Rachel Lovell and Mary Weston provide a compelling case for investigating all previously untested sexual assault kits, regardless of whether there is a CODIS hit. Listen along as they discuss the recently published article, "The case for 'investigate-all:' Assessing the cost-effectiveness of investigating no CODIS hit cases in a sexual assault kit initiative" in this episode of Just Science. This season is funded by the National Institute of Justice's Forensic Technology Center of Excellence. 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, Tyler Raible.

Tyler Raible [00:01:51] Hello and welcome to Just Science. I'm your host, Tyler Raible with the Forensic Technology Center of Excellence, a program of the National Institute of Justice. Today, our guests are Dr. Rachel Lovell, Research Assistant Professor at Case Western Reserve University, and Mary Weston, Assistant Prosecuting Attorney at the Cuyahoga County Prosecutor's Office and supervisor of the Cold Case Unit. Rachel, Mary. Welcome. It's great to see you.

Rachel Lovell [00:02:12] Thanks so much.

Mary Weston [00:02:12] Thanks for having us, Tyler.

Tyler Raible [00:02:14] Before we dive into today's material, can the two of you give us a little background as to how you got started working in sexual assault response reform?

Mary Weston [00:02:21] So in Cleveland in 2011, there was a case that came to the forefront, it got a lot of media attention. It was a serial killer - a guy was found with several bodies in his yard. In the wake of that prosecution, several other women came forward and said, hey, that guy did the same thing to me, but I got away, and I told the police what happened to me and nothing ever happened. And so there was some attention placed on the Cleveland Police Department about how they were investigating sex crimes and what they were doing with sexual assault kits. So thousands of sexual assault kits were determined to be in property at the Cleveland police, and several thousands of these had not been tested. So at that time, our attorney general at the time, who was Mike DeWine, he's now our governor, had agreed to test every kit. He had done this, I believe, based on other cities that had used sort of a forklift approach as well, testing every kit, not triaging kits, in other words. And so Cleveland Police Department, my office, the Cuyahoga County Prosecutor's Office, and the BCI lab, which is under the attorney general's office in Ohio,

agreed to test all these kits and follow up on the testing with investigations. And so I, as a prosecutor, was added to the team in the prosecutor's office early on in 2013 because the testing of thousands of rape kits understandably results in a lot of leads. Right. So you get a lot of DNA profiles being detected in these rape kits. And what's happening is what you want to see happening, right. Is that the profiles are being detected from the evidence and those profiles are being added to the CODIS database and hits are being returned. And all these hits were coming in. Right. All these kits are coming back to our office. Our office had to quickly assemble a team of prosecutors and investigators who could follow up on these kits and the testing and the results. And at that time, my boss reached out to Case Western Reserve University because he had some understandable questions like, hey, how do we prioritize these results? We certainly don't want somebody to be attacked again while we're working on their case because we just have so many cases, we can't prosecute all of them at one time. I believe my boss had understandable questions, too, like what do we do with the data that's going to start coming in? Are these patterns, are we seeing patterns here? Are these patterns, are they coincidences? And if they are patterns or M.O.s, what do we do with that kind of information? Eventually we were able to take advantage of some funding. So we applied for some funding through BJA SAKI and we received some funding through them. We were able to use that funding to integrate this research partner into our research, but we had additional questions at that time like what kind of metrics do we measure and what do we report? So all those things were ways that my boss at that time envisioned bringing in a research partner as a big part of our team. And I believe he reached out to a colleague of Rachel's at the time. And that's when I met Rachel, and the magic started. Right. So we started working together on these cases and we've been working together ever since.

Tyler Raible [00:05:31] Is this type of partnership unique? What makes this partnership so impactful to the work that you both do?

Rachel Lovell [00:05:36] I think for us, the embeddedness that we have with the task force is really particularly unique. I think oftentimes researchers don't necessarily work in conjunction with social service agencies or public agencies, prosecutor's office, police, and so forth. But the center where I work, the Begun Center for Violence Prevention, Research, and Education - the longest title ever - at Case Western Reserve University - also a long title - almost all of my work is applied work, meaning we're working in the community and with community partners. But I think this relationship is unique in that it is sort of embedded. And it wasn't necessarily the plan to be embedded in the way that we are now. But when I first started leading up the research part of this, Mary's office, the prosecutor's office was coming to us and saying, you know, can you help us with some of the data? Can you help us identify and prioritize offenders? Can you help us figure out what we're doing is right or wrong, what we should be keeping, what should we be changing? And it was just such, SAKI was really new at the time. Actually, we started working with them before there was federal funding. As Mary said, her office funded the first pilot initiative. We didn't know it was a pilot at the time because we didn't know we were going to get more money, but now we call it the pilot because we got additional funds. But it was just so unique and there wasn't really very much to pull from. There were some, a few other jurisdictions that had started as well - Detroit and Houston, a few others. But honestly, it was because I couldn't really understand exactly what I was seeing in the data. I didn't really understand the process. I needed to really be in the room with them to understand how they're talking about the cases. What do they mean by a John Doe, for example? What do they mean when they say this versus that? What is considered insufficient evidence? What are the different types of CODIS hits? Things like that. You know, I think really what made this unique is that they also provided us with complete

contracts and data use agreements and all those sorts of things. But we got access to data that was really unique and very extensive and was really given the option to say, you tell us what we should be keeping, you tell us what's most important. You tell us what questions we should be asking these data and what practices we should be doing. So we were given a lot of leeway to be able to really dig down into that and really gave us sort of carte blanche to interview people on the task force, to listen in on meetings, of course, again, with all the caveats of protection of human subjects and so forth. But so I think they were very open. And as a result, I think we've been quite productive and, in our collaboration, both with the data and with the relationship that we have.

Tyler Raible [00:08:26] And it seems that that partnership has blossomed into a lot of, a lot of excellent resources, and that actually transitions well into the one that we're going to talk about today. So I know that you recently published an article titled "The case for 'investigate-all:' Assessing the cost-effectiveness of investigating no CODIS hit cases in a sexual assault kit initiative." Can you tell us a little bit about the article?

Rachel Lovell [00:08:46] Yeah, so the article is actually an extension of the pilot project that I just mentioned. So back in 2016, we released a research brief that was a cost benefit, cost effectiveness analysis of the task force. It was part of what was a deliverable for the pilot project. And at that time, the initiative was about a third of the way through investigating the cases. And the testing hadn't even been completed yet. So they were still really early, good enough in the process that they had processes in place, but not a third of the way. We decided we really wanted to answer some really important questions from the data around cost because they had just really completed reinvestigating all previously untested kits. So what's really unique about the prosecutor's office and their initiative is that they had decided not only were they going to test-all, but they were going to reinvestigate-all, sort of start from scratch in the investigation part, and take a second look at all of these cases, not just the ones that returned a CODIS hit from a stranger rape and some of the others. So it was a huge undertaking. They knew it was going to be a huge undertaking to reinvestigate over five thousand never tested kits and the cases resulting from that. But they had just completed or almost just completed, 98 percent of the cases were done. And so it provided a really unique opportunity for us to ask questions about the data, not only to see overall was the initiative effective and update our numbers from earlier from our pilot study, but really see whether it was cost effective and look at the outcomes associated with reinvestigating all the cases, not just those that had CODIS hits with them. So that was really kind of the forefront. I mean, I think a lot of the work that we do has to do with policy and policy recommendations and sort of using research to help answer real world questions. And I think a lot of SAKI sites are looking at this, and those that don't have SAKI funding, and saying what's the value in testing these kits and what's the value in reinvestigating them? All of these decisions have to be made because there's finite resources within the public system. So they have to make decisions. Everyone wants everything done, but they have to make prioritizations and decisions about how to use resources. So we wanted to look at the numbers and see whether it was cost effective to do so and sort of provide some information into the generalizable knowledge around that.

Tyler Raible [00:11:27] So once you've conducted all this research - you've looked at all these numbers, you've analyzed the cost and benefits - was there anything particularly surprising that you found or anything that maybe stood out to you?

Rachel Lovell [00:11:39] I think a few things really did stand out. We did know that many of the cases that didn't have a CODIS hit were less likely to lead to a conviction from some of our earlier work with their data. And that there's many reasons for that, primarily if the

testing didn't return a hit and there wasn't a named suspect at the time, the testing didn't provide any further investigative leads. And so those are still really tough cases to go through because you really don't have any more information now than you did before. And then sometimes there were reasons why there wasn't DNA within the kits and things like that. So we knew that they likely weren't going to have as many convictions, but we didn't really know how the numbers were going to pan out in terms of cost effectiveness and whether the convictions sort of produced a savings to the community and made the community safer as a result. So really, using the sort of scientific method of asking questions you don't necessarily know the answer to, in some ways it was surprising, but in other ways it wasn't surprising, given the amount of serial offenders that the initiative has identified. That savings really comes into play because we're learning new things about serial offenders and how often they continue to offend. And that's one of the things, I guess, that is surprising about testing and all these kits, is that you're finding that we had incomplete knowledge around serial offenders, and Mary can talk because she prosecuted many of those serial offenders, and kind of what we were learning about that on that end.

Tyler Raible [00:13:17] There's all this wonderful information. And I sat down, and I read through the article again last night, and the data you recovered is incredible. Mary, my question for you then is now that you have all this information, what can agencies within the criminal justice system do with this article? How is this information going to benefit them?

Mary Weston [00:13:33] Well, from my perspective, I was surprised to learn early on in this project that the benefits of testing all the kits. So I think if you would have asked me six years ago, should we test kits where the offender is already known? I don't know how I would have answered that question. But I was down in Columbus to testify in support of testing all kits, and I met a woman who was a survivor of a sexual assault, who had been raped as a college student, and she did not know her attacker. He was a stranger to her. But in chatting with her, we were talking about the research that was starting to come out, which was that - and I thank Rachel and her team for this and other researchers across the nation - noting that offenders are not as pigeonhole-able I guess as we thought they might be. Stranger rapists do not only rape strangers - they are more opportunists, and they will attack people they know as well. And the woman that I met in Columbus, her story haunted me because I thought, well, what if that man that attacked her attacks his live-in girlfriend and the police look at that kit and say, well, we don't need to test this kit. We're not going to learn his identity from testing his kit. However, testing his kit might produce CODIS matches in the database to other kits. And that certainly bore out here in Cuyahoga County with our kits. When we had these CODIS matches come in from the testing of these kits, they were not just only stranger rape cases matching together, they were acquaintance rapes, they were intimate partner rapes, and they were stranger rapes. So it was very enlightening. And criminal justice partners everywhere can learn from the fact that testing all the evidence will produce leads into your unsolved cases.

Tyler Raible [00:15:18] I mean, there's certainly a compelling argument - at this point when you look at the economics and you look at the leads that you're producing, I don't see why you wouldn't. But Rachel, in terms of the article, are there any other key features you'd like to highlight before we really get into the conversation around test-all and investigate-all?

Rachel Lovell [00:15:33] Yeah, I think there's the conversation publicly across the US. By the way, I've been talking with folks in the UK, and this is all sort of new to them. They're- the idea of testing all seems very strange to folks in the UK. So the US is really, I think,

leading a lot of the work in this space. And jurisdictions like the task force and others are helping facilitate that because test-all in the United States has now - in most states, the majority of states within a 10-year span of time - has become the mandate. So they are mandated by state legislation that they have to test or at least address their kits moving forward. In terms of policy-wise, in a short period of time, policy has moved very quickly to adapt the idea that we should test all. What I would really like people to understand is that we should be testing these kits, I think in terms of that's the right thing to do. But just the testing will always just be a cost to the system. Now, it's still the right thing to do, and I'm not arguing that you shouldn't, but it's still always just going to be a cost because testing is just a cost. That sheet of paper that's produced or the lab report that comes from the testing becomes more than just a sheet of paper when that case is looked at again, when it's reinvestigated and someone does something with the information contained in that lab report. That's where the cost savings comes from. It comes from - not the testing. The test is sort of necessary, but not sufficient in this space. It's the follow up that makes that important. So in Mary's example of the survivor she met in the sort of stranger/non-stranger crossover - is what we call our sort of raping strangers and non-strangers or sort of crossing over between different groups - because they were reinvestigating all of those, they were finding that in the cases where they were non-strangers, they had identified suspect names and then they linked to one that was a stranger, and now you have a named suspect. But if they had just sort of whittled down the cases from the beginning and said, OK, we're only going to look at strangers, and we're only going to be the ones that returned DNA hits, they would have missed the opportunity to get those leads by looking at the other cases, the cases that didn't have DNA or didn't return a DNA hit. And so it's really much more holistically using all the information that you have to really be able to follow up. So I think that's the really important component of this, that- but that's really going against the grain in many ways in terms of what other jurisdictions are doing, not just those that are addressing their backlogs, but also those that are looking at current cases, and that in many jurisdictions, the information that we're learning isn't being filtered down to them yet. So they're just like, well, why would I need to test this kit? Because it's really both parties agreed that there was sexual contact, so it's a matter of consent that you're, in fact, prosecuting. Really kind of changing practice in the untested, I think can also inform current practice and not just for the backlog of rape kits, but also moving forward about how do we think about reinvestigating these cases.

Tyler Raible [00:18:51] So you bring up something that I was hoping we could talk about. Before we really dive in, I was hoping that the two of you could give a brief explanation to our audience on the difference between test-all, investigate-all, investigate just CODIS hit, investigate no CODIS hit - could we get a little distinction on that so that our audience has a jumping off point?

Mary Weston [00:19:08] Sure. So when we started getting the results from our cases, like I said, we did a forklift approach. We tested every single kit and about half of those kits produced a DNA profile that was sufficient to be uploaded to CODIS, which is the Combined DNA Index System. It's the national database - they have requirements. They require the DNA profile to be of a certain nature and quality to even add to CODIS. So about half of our kits had that kind of result where something could go into CODIS. Now, just because something goes into CODIS doesn't necessarily mean you're going to get a CODIS hit. It depends on if the source of your DNA in your evidence, if that person's DNA is in the offender side of CODIS as a result of being a convicted or arrested felon, for instance, depending on the state. So let's say half of our CODIS uploads resulted in CODIS hit. So a CODIS hit is a lead. Right. So if I submit a rape kit for testing and a profile is able to be uploaded to CODIS, and if it does hit to a identified offender, I get a

notification via email or via a letter saying, here's a lead. It's just a lead. It is something to follow up on. It means the DNA hit in the system. So some of those cases got CODIS hits.

Mary Weston [00:20:24] Now, some of our cases, there was a CODIS upload, but no hit at all - sort of a second group of results that we got. And in those cases, we still investigated all of those cases to determine if the person could be identified in other ways. Sometimes there's matches between kits, but no hit. What this means is there's separate rapes that involve what looks like the same offender because the same offender's DNA is in multiple kits, but it's not hitting to a named person. When we talk about John Doe indictments, we're generally talking about a kit where there was a profile in CODIS that we are fairly certain and confident is the offender and not, for instance, like a consent partner. And we have in Cuyahoga County indicted those cases. We indicted the DNA profile. We've done that 170 times. So it's just State of Ohio versus John Doe Number 170, for instance. And if you look at the actual indictment, it's the bunch of DNA data, but that's the person we've indicted and we've done that to preserve our statute of limitations. If it's that second group I'm talking about where there's a profile in CODIS but no hit.

Mary Weston [00:21:26] And then for half of our cases, we tested the kit, but the kit did not produce a DNA profile that was of sufficient quality for CODIS. And so we still investigated those. We determined there was a benefit to investigating those as well. Perhaps those could be solved in other ways just by identifying a suspect through perhaps fingerprints or through kind of the old-fashioned way - who lived in the area, who fits this description? Do we have a nickname? Can we- what can we learn about just taking a deep dive into the case file? Some of those cases involve named suspects, right. There's a lot of sexual assaults that are committed by people you know, right. So sometimes we get the results back - nothing's in CODIS, but you take a deeper look into the file and it's like, oh, OK, well, we know who did this. We'd reach out to the victims in those cases, and a lot of times we would learn they did not want to prosecute at the time. They were not comfortable with that in the aftermath of being assaulted, but now they're more comfortable with it. And so we were able to bring prosecutions forward where there were no CODIS hits, there were no CODIS uploads, but we were able to determine who the offender was. And the victim was in a place where she was willing to go forward now, and the statute of limitations had not passed.

Tyler Raible [00:22:38] And based on your response and based on the article, it seems like the push for investigate-all is kind of the way to go. So what are the economic benefits of test-all and investigate-all?

Rachel Lovell [00:22:49] The benefit, really I mean, besides the sort of that's the right thing to do and that's a separate conversation. But if you're just looking at the economics of it, our analyses are based upon what we're learning now about how frequently serial offenders will continue to offend if they are not sort of taken off the streets. We can see that actually pair out in the data that you can see because unfortunately, they weren't really prosecuted at the time, and sort of undetected rapists is often the word used in the literature when they're not prosecuted, so they just - or arrested. So they just keep offending. And you can see the kits hitting all to each other. Right. It was like, here's one in '98 and '90 and 2000 and 2003. And, you know, so the savings really comes from if you prosecute them now, you're preventing them from being able to - or at least for an extended period of time if they're in prison - to continue to rape. There's a established cost value associated with a rape, and it's the second most expensive violent crime after homicide. So it's around $240,000 is the number that economists put on the cost to the victim - the victim themselves, both in the short term and long term, direct and indirect cost

to them. So here's this value. If we can prevent future rapes by getting these offenders and prosecuting them, hence the investigate-all, then you can prevent future rapes and thereby save the community money. And also, it's the right thing to do in terms of victims deserve justice. They deserve to be believed and all these sorts of things. What we're trying to add here is the sort of economic argument to this, to not only is it the right thing to do, but you can also save the community money and make the community safer by prosecuting these offenders.

Tyler Raible [00:24:41] Absolutely. I mean, the moral component is compelling by itself. And then when you toss in the economic benefits, it's pretty easy to see that there's a lot of value in it. In terms of criminal justice outcomes, what are the benefits of test-all and investigate-all?

Mary Weston [00:24:55] Yeah, in terms of criminal justice outcomes, you're going to see two big benefits. You're going to solve your cases. You're going to produce leads in your cases. Also, on the other hand, you're going to empower victims to be involved in these cases. So I'll give you an example of the way you're going to solve your cases if you test all of your kits. We had a situation here where we had a kit that got tested. It was not producing a lead to the suspect. However, based on the fact that we were testing all these kits and investigating all these kits, the M.O. of this person seemed particularly unique. And it seemed very much like a serial rapist that we were prosecuting at the time named Nathan Ford. And so this particular kit we took a second look at and was not hitting to him. He was in CODIS. This kit was not hitting to him. However, we were able to ask the lab to take a different kind of look at it and do a different kind of DNA testing on it that had nothing to do with CODIS. And they were able to link him to this crime. Testing on previously untested sample in a different kind of technology using Y-STR technology. And that woman's case would never have been solved because nothing had gone into CODIS. If you were to look at it alone, it was unsolvable. But if you were to look at it in terms of this looks like some other cases we've been looking at, it was solvable. It was prosecuted and he was convicted of that crime. And it was an awful stranger rape of a woman that was just washing her car and he attacked her. There's also you're going to get the benefit of empowering victims. Not only that way, you can imagine how wonderful it was to tell that woman we had solved her crime. I mean, something terrible happened to her, but we were able to give her that peace of mind. We know who did this to you, and he's never going to get out of prison because that was the situation with that guy. But there are other cases where you're not going to get your CODIS hit, but you might get like I said before, you might get some matches. You might get kit that's matching to another kit. And if you were to look at those alone or determine that there was nothing to do because there were no CODIS hits, that would be the end of the story. However, there is the possibility of prosecuting those cases. You can prosecute them as a John Doe. My experience is that victims, survivors are empowered when you say, hey, we took a second look at this case. There is some DNA here - that DNA, it has a lot of legitimacy and it empowers victims. They'll say, oh, there's DNA. Yes, yes, there's DNA in your case. So we can prosecute this case. We could prosecute as a John Doe. If we identify who it is, we have that extra strength. We have that extra corroboration to what you told folks about what happened to you. We have that DNA that helps prove what you said. And I have found that when you tell a victim that you have DNA in her case, that you've taken a second look at it, that you want to work on it more than perhaps it was worked on in the past, you're going to get victims that are involved, that have questions, they're curious, and they are feeling empowered to move forward and be involved in a prosecution, if you choose to go forward with those cases.

Tyler Raible [00:27:49] Do you recommend that other agencies that are addressing untested sexual assault kits should consider an analysis like this pertaining to investigation then? It seems like there's obvious benefits, but what would be your recommendation?

Rachel Lovell [00:28:02] One of our goals of this is to provide a framework for other jurisdictions to be able to do their own cost effectiveness analysis and insert their own parameters to the framework that's been provided. So the hardest part is sort of finding estimates for things when you're doing these sorts of studies. We're like going back to the literature and trying to find all the estimates that would be good to put into this and sort of how to think about which costs to include and which benefits to include and that sort of thing. But once the framework is there, the actual math is not that difficult. Once you kind of know how to set it up and you know the sort of numbers to put to those things, not heavy statistics or really other things like that that you would think of. So our goal from this is also to provide a framework for other jurisdictions. So that for sure, I think based upon this one site, their initiative has saved our community money and made our community safer for sure as a result of this initiative. But for other jurisdictions, they kind of need to make their own decisions about how and what they want to implement. What we're suggesting is this seems to be a really good example, because here's an extensive case study. Here's what was done here. Here's evidence to support how this might work. And I would suggest maybe taking samples of these cases, you know, starting on a smaller scale and sort of seeing what are the outcomes from these things? Are you getting prosecutions? Are you getting leads? And I think many of them will find that if they're willing to sort of take a different look at this and sort of say maybe we didn't always do everything in terms of investigate back then or in prior ones, maybe we can do something more or different here. Maybe we can give justice to victims who perhaps didn't before or, you know, the cases were closed very quickly. Maybe victims are in a different place now and they do want to - so sort of re-engaging with them, sort of having those conversations. And I think really just trying to see. Well, from these other cases, are there other leads? So talk about being embedded. One of the things I hear the prosecutor's office often say is now we're steering a shift. If we look back at our time, if someone looked at our cases 20 years from now, would they look at these cases and say, we did really everything we could to try to make our community safe, to get justice for this, and to hold offenders accountable? And I think using that as the overarching theme of the overall untested rape kit stuff is to say maybe it wasn't always done in the past the way it should have been. We're learning a lot, and we're continuing to grow and improve in how we're doing these. So when we were in charge, are we doing everything that we can to do this, and not only for the victims, but is it a good choice in terms of a good use of our resources and an allocation of our resources to do this? And I think this paper really starts to get at that evidence to say yes - by changing policies and practices, you know, you can save the community money.

Tyler Raible [00:31:09] I completely agree. And Rachel, in terms of saving the community money, do you have any figures that you could share with us - maybe how much they save per kit that's tested, per investigation that's followed up? Something to give our listeners like a concrete idea of what the actual value is.

Rachel Lovell [00:31:26] Yes. And there are lots of numbers in the paper if you wanted to read it. By the way, for any listener who wants it, I think it's behind a paywall, but the journal article is - a little tidbit, if you email the authors, they are always so happy to have anyone read their article that they can and will almost always very happily provide you the article for free if you just email the corresponding author - that would be the case with me, I would be so happy for anyone to read this that if they wanted to. So the numbers here are,

the initiative, just the idea of testing and investigating and providing victim advocacy cost our county 10.6 million dollars and took about eight years to complete. The savings as a result of that is about 26.5 million, which is about five thousand per kit - 5,127 to be exact. If you break down that 26.5 million, about 16.5 million is associated with reinvestigating the cases with CODIS hits, and about 10 million is associated with those that are reinvestigated with no CODIS hits. So in other words, those with CODIS hits save the community more money because again, they were more likely to lead to prosecutions. However, still 10 million was saved from also looking - and this is the savings, not the total cost - just the savings is ten million dollars from reinvestigating the cases with no CODIS hits. So I think if you're only looking at just reinvestigating the CODIS cases, that's not a bad choice because you'll still save the community money. However, you can save the community more money and continue to make the community safer and prevent future rapes by really looking at it from a larger perspective and really reinvestigating all.

Tyler Raible [00:33:20] It definitely makes a compelling case for investigating all. When you look at those numbers, those figures are massive. So what's next for each of you? Is there anything you're excited about? Any future projects, research, events, resources that might be coming out?

Rachel Lovell [00:33:32] Yesterday, I wrote my first and probably last op-ed. Getting what I wanted to say out in 250 words nearly killed me, but I really felt very passionately about getting this information out to our community. So I wrote with my colleagues who published a study with me and actually with Mary's office and Mary. So with everyone's input, we wrote an op-ed, and it came out yesterday in the Cleveland Plain Dealer to give information back to our own community and say, here, your tax dollars paid for this thing. Look what's come from this, and some of the other work that I've done. We were hinting at the fact that all of the press and all this information has really seeped into our local community pretty extensively and has affected a victim's willingness to engage, get a sexual assault kit collected, and report to police, and to think that it wouldn't impact how victims take in that message seems strange. So, of course, I think it is making that, and I sort of wanted to give that information out in a way that someone wouldn't have to read through a very dense journal article to be able to glean the bigger picture from that. So-.

Mary Weston [00:34:48] Let's say for me, I am excited because as we continue to work on this project, we're taking a look at some newer cases. And when I say newer, they're still not new. They're newer to me. They're not from the 90s anymore. But we have agreed to take a second look at some of the ongoing or newer Cleveland police cases. So our initial project was to look at cases from 1993 through 2011, and we picked 1993 because in 2013, the statute of limitations for rape, I should say, was 20 years. So we could only go back as far as '93. Since we have completed that project, which is very exciting in itself, we've moved on to looking at some 2012 cases moving forward, taking a second look at cases that could benefit from a second look because, you know, DNA has changed. There's newer DNA even since 2012. I know in our county in about 2015, our state lab moved to a more advanced DNA machine. It's more sensitive, and so there is an opportunity to take a second look at cases and see if it could benefit from additional or updated testing or if there's evidence that has never been tested. So as part of this new project, the 2012 cases moving forward, for instance, there was a case where there was no CODIS lead produced from the testing of the kit, but we tested the pants. We knew that the attacker had touched the pants in a certain place, according to the victim. So we tested the pants and it produced a CODIS hit to a serial sex offender. So that was very exciting. And then the other thing that we are doing is even in the cases where we do have those CODIS uploads but no hits, our John Doe indictments, we are looking to use SAKI funding

to use, to do genealogy on those cases, to produce leads that CODIS is not producing. And that's pretty exciting as well. I think we're going to have some pretty good results pretty soon. Some of those cases look very good for solves.

Tyler Raible [00:36:40] The future of this technology is unbelievable. We had a couple of genetic genealogists on in a previous season, and it's remarkable. Are there any final thoughts you'd like to share with our listeners before we wrap up today?

Rachel Lovell [00:36:51] I do. I think the sort of larger takeaway, I think, from this is that right now we are in a very unique point in time, both with the pandemic and with the social justice movement around the criminal justice system. And so really, in a time of national debate about how law enforcement should be directing and spending money, I think testing and investigating not only backlogged rape kits, but really changing and reforming our response to sexual assault is well worth the effort of investment in this space, and that traditionally sexual assault and sexual crimes have not been viewed as something that has been important in terms of priorities. And you can see that many of these across the United States, these departments are under-resourced and underfunded and overworked. And I think the larger takeaway from this is that by allocating funds to really getting these dangerous offenders off the streets, you're preventing future crimes. You're making the community safer, you're saving money. And it's also the right thing to do. And these offenders are committing lots of rapes and lots of other types of crime. And so by really focusing our efforts on that, we can save the community money and make it safer.

Tyler Raible [00:38:09] Rachel, Mary, thank you so much for sitting down with Just Science today to discuss the article. For those listening, the article once again titled "The case for 'investigate-all:' Assessing the cost-effectiveness of investigating no CODIS hit cases in a sexual assault kit initiative." So thank you both for sitting down and talking with me today.

Rachel Lovell [00:38:25] Thank you.

Mary Weston [00:38:26] Thanks, Tyler.

Tyler Raible [00:38:27] For those at home who are interested in checking out the article, you can access it in the Journal of Forensic Sciences. And if you enjoyed today's conversation, be sure to like and follow Just Science on your podcast platform of choice. For more information on today's topic and resources in the forensic field, visit forensiccoe.org. I'm Tyler Raible and this has been another episode of Just Science.

Voiceover [00:38:48] Next week, Just Science will be sitting down with Marya Simmons from Shift in Notion Consulting to discuss supporting male victims of sexual assault. 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.