

Just Solving Cold Cases with Forensic Genetic Genealogy

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

Voiceover [00:00:19] 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 Case Studies: Part 1 mini season, Just Science sat down with Leighton D'Antoni, the Assistant District Attorney in Dallas County, Texas, to discuss how forensic genetic genealogy was used as an investigative tool to help solve a series of violent cold cases. In the 1980s, several violent sexual assaults occurred in Dallas County, Texas and Shreveport, Louisiana. These cases were all linked by a foreign DNA profile; however, no suspect was found, and the cases went cold. In 2020, the investigations were reopened, and forensic genetic genealogy was used to help identify a common suspect in all six cases. Listen along as Leighton discusses the journey to bring justice to survivors almost 40 years later and the prospects of using forensic genetic genealogy as a tool to help solve previously unsolvable cases. This episode 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, Jaclynn McKay.

Jaclynn McKay [00:01:29] Hello and welcome to Just Science. I'm your host, Jaclynn McKay, with the Forensic Technology Center of Excellence, a program of the National Institute of Justice. Today, we will be discussing how forensic genetic genealogy helped solve a series of violent cold cases in Texas and Louisiana. Here to guide us in our discussion is Assistant District Attorney Leighton D'Antoni. Welcome, Leighton. Thanks for taking the time to talk with us today.

Leighton D'Antoni [00:01:54] It's great to be here, Jaclynn. Thank you for having me.

Jaclynn McKay [00:01:57] Could you tell the audience a little bit about your professional background and your journey to become the Assistant District Attorney in Dallas County?

Leighton D'Antoni [00:02:04] Sure. I guess to start out with after I graduated undergrad, I actually went to go work in Silicon Valley and along the way determined that I wanted to go to law school, but I wanted to go to law school, really, to either do tech law or I was also interested in kind of entertainment and sports law. But I got to law school and realized that I just wanted to be a trial attorney. Started clerking at the San Diego County Public Defender's Office, which was probably one of the more fortunate things to happen to me in my career and ended up getting hired on there, worked there for six years. My family and I, we moved from San Diego to Dallas and after a few months I got contacted by the DA's office and they said, "Well, would you be interested in coming interview here?" There for a couple of years trying cases, enjoyed it. And I think it was about in 2015 I had gotten word that our office had applied for a grant. It was called the Sexual Assault Kit Initiative, which is commonly referred to as SAKI. This was the first year of the SAKI program and our office was going to be one of the original SAKI grantee sites. And I lobbied pretty hard to kind of run the team from the beginning. And seven years later, I'm still doing it.

Jaclynn McKay [00:03:17] Can you walk us through a little bit of background on these cases and why they possibly went cold?

Leighton D'Antoni [00:03:23] So there was a series of very violent apartment, primarily break in, aggravated sexual assaults that had taken place in the early eighties in Dallas. Very similar in those, again, they were all apartments of young, single women who were living alone in Dallas in primarily the same geographical area in Dallas. It was an area that had a lot of young singles living in it, a lot of apartment complexes, a lot of very large apartment complexes. And what actually made this and other cases similar or tricky is that, unfortunately, at the time there was more than one serial rapist in this area and these apartments. But in this particular case, it ultimately and again, years later, through great work by the Dallas Police Department and the detectives and the folks who worked on this case through the years for a very long time were able to link up four of these cases by DNA. There was an unknown male DNA profile in the sexual assault kit. So in four of the cases, it all matched, but unfortunately it did not match to anybody in CODIS and there was no suspect standard to compare it to that also would have been a match.

Jaclynn McKay [00:04:33] And was the unknown DNA profile from the Dallas cases ultimately linked to the cases in Louisiana as well?

Leighton D'Antoni [00:04:40] Yes. So ultimately found out because, you know, since CODIS is a national database, if there were cases in other jurisdictions outside of Texas or outside of even Dallas County, certainly we would have gotten notifications, and we did get notifications that there were two case-to-case matches in the Shreveport, Louisiana area.

Jaclynn McKay [00:04:58] When the cases were reopened, your office teamed up with the FBI to use forensic genetic genealogy to help identify that foreign profile that all those cases had in common. Can you describe what led to the decision to use forensic genetic genealogy and why specifically those cases were chosen?

Leighton D'Antoni [00:05:16] For me, it actually goes back to 2018. I think it was the spring of 2018, a book had come out about the Golden State Killer, Michelle McNamara's book, certainly one of the big unsolved cases in California. And the book comes out, you know, I started reading it immediately and was almost done reading it, I think it was just about the end of reading it when I remember seeing this tweet from Patton Oswalt, who was Michelle's husband before she passed away. And it was just like "big news coming," and based on the other people that were replying to him, I knew it was very much involving GSK, Golden State Killer case. And you know, Paul Holes and all these, you know, the people from the book that had worked on this case were- were just really excited. And sure enough, within 24 hours they had announced the arrest. And so immediately, I'm just what is FGG? What is forensic genetic genealogy? It was so mind blowing and so new, but to me had the possibility of being such a powerful investigative technique. You know, since I was already kind of the DNA guy in our office, I knew it was something I wanted to learn as much about as quick as possible, but that was kind of the first real big national case, and it was in its infancy. It wasn't until early or mid-2019, I'd contacted our local FBI field office asking them, you know, because I knew the L.A. FBI office had been working on GSK and was wondering, are we doing anything around here locally or down in the Houston office or one of the other areas? You know, is this something we can start doing here in Dallas? And, you know, luck would have it that the Dallas field office had appointed an agent to really kind of be the FGG guru for Dallas, and he's been amazing. We still collaborate today on almost all my cases, but he had gone to L.A. and was trained by all the people. You know, the FBI and DOJ at the time were formulating their process, procedures, and regulations for how to do FGG - he was very much a part of that. We were working on another case, the very first case we started working on in 2019 that we actually just recently solved in 2022, so three years later. But, you know, again, we were just kind of

talking about it, not really putting it much into action, but then in March of 2020, and I'll never forget it because I think it was the second week of March and it was right when COVID hit and so, you know, our office shuts down. Everybody's work from home. And again, if you can remember back at that time, everyone's just kind of like mind blown about what's happening in the real world. But I got an email from a woman and she kind of just told me her whole story and she was one of the survivors in these cases. I didn't know anything about these cases at the time, so this was all kind of new to me, and while it was difficult to have the courthouse shut down, have our office shut down during COVID, but it did allow me to spend a lot more time on the investigative part of what we do and our SAKI team does. And while we do have the unique ability to investigate our own cases, there hadn't been a lot of time for that. So it was just kind of a perfect meeting point where we had a little bit more time so I started digging into it, my team started digging into it, contacted the FBI, and on paper it just looked like the perfect FGG case. I mean, we had an unknown male DNA profile. We knew it hadn't matched anybody in CODIS. We had already done familial testing that hadn't yielded any results. And, you know, the facts of the case itself, it was kind of eerie to me because they were so similar to GSK, I mean it was here's a guy who was breaking into houses in a ski mask with a gun. He was tying up his survivors. So I brought it to the FBI and they said, yes, this is absolutely the great, a great case. Let's, you know, we did it right away. There was no delay. You know, they got their ducks in a row and it all came together pretty quick.

Jaclynn McKay [00:09:21] Was the forensic genetic genealogy ultimately successful?

Leighton D'Antoni [00:09:25] Sure. And, you know, there's a lot that goes into that. So, first of all, you've got to still have the DNA evidence. And so we're talking about cases from early 1980s. Having worked other types of cold cases from the eighties and seventies, sometimes you get lucky, and you still have the DNA, sometimes you don't. In this case, we were able to locate the DNA - it was still at the crime lab, and then you got to go through this - I don't want to say a rigmarole - but you got to locate the DNA, determine the DNA concentration, the quant to that DNA sample, whichever lab is going to do what you call- what we call SNP testing. And that's again the kind of forensic testing you use for FGG that's different than STR. But that lab is going to want to know what technology was used to kind of QC the sample, how much volume is available in that DNA - are we talking about a single source or mixed sample? You know, because you don't always get a clean separation of the female and the male DNA in these sex assault homicides or sex assault cases. And then if it's mixed, you have to determine what the ratio is. There's a lot that goes into it. I think at that time, and things have certainly changed just even in the last two years, I don't think the labs were testing anything that was more than like an 80:20 mix in low amount of DNA. My experience and, you know, kind of going into that, you just kind of have to assume that maybe this SNP testing is going to consume the sample - is that okay? And certainly, every state and every jurisdiction probably has different rules about consuming samples, and we certainly have ours here in Texas that we have to follow. But once you get through all those hurdles, then you get into, you know, typically your local labs got the DNA, they're going to extract and send it off to one of the labs that can do the SNP testing. So, yeah. So then you send it off, I believe on this case we got an 89.9% call rate, and that's kind of the- the percentage of the- the called SNPs out of the entire SNP list. And again, at the time, I didn't really know what any of this meant and I'm not a scientist. I've gotten to understand a lot of this, but at no point should anyone take me for being a scientist on a lot of this. But I remember we got the results of the SNP testing and that 89.9 call rate on a Thursday night. And the FBI agent and genealogists began working on, you know, the research in building that tree. And it was that Saturday afternoon, I was at one of my son's baseball games, and I get a text and he's like, "We got him." And I was

blown away because we had this other case we've been working on over a year and, you know, we had kind of a family tree, but, you know, nothing that we could point to- to really a suspect or even a group of suspects. And I called him from that field, and he was like "It's him." You know, kind of walked me through the- what they had and how it all made sense. And it was pretty amazing.

Jaclynn McKay [00:12:17] After you found the suspect in these cases, was his DNA compared to the evidence?

Leighton D'Antoni [00:12:22] Sure. So a very important part of FGG and the FGG investigation process is kind of the transition now back from FGG transitioning to our traditional STR testing. And so what I mean by that is, you know, we used the SNP testing and the genetic genealogy to identify a suspect or in some cases I've had it's, you know, maybe brothers or family members. But then once you have your suspect or suspects identified, it's important to get a reference or DNA sample from them to do STR testing to compare to that original DNA that was identified in either a sexual assault kit or an autopsy. So in this case, we were able to get a sample of our suspect's DNA, and this is David Hawkins. And as soon as we got that sample, we took it to our local crime lab, again, because they're certainly the ones that are the best at doing the STR processing for us. They're the ones who are ultimately going to be testifying at hearings or in trials about this case because ultimately, it's STR - that doesn't change, doesn't change for prosecutors and law enforcement. You're going into court with an STR DNA profile match. The FGG certainly helps get you to there, it's an investigative tool that allows you to identify the suspect, but nothing changes in terms of who I'm calling as a witness in court to testify about that DNA match. So we got that sample to the lab. They were amazing, got our results very, very quickly. And once we confirmed through that STR DNA testing that David Hawkins was our suspect in, you know, certainly all our cases in Dallas and those two cases at Shreveport. And at this point, we knew a little bit more about him, and we were confident that he had other cases that we didn't know about. He was arrested, and it was such a strong case against him that, you know, it made my job very, very easy.

Jaclynn McKay [00:14:19] After he was arrested, did you ultimately take him to trial?

Leighton D'Antoni [00:14:22] So he was arrested. And it was shortly after I think he met with his lawyer one or two times. I don't even think we had taken it to grand jury yet because in a big case like this, it's going to take us a little while from arrest to prepare what we're going to take to the grand jury to get an indictment. You know, these are cases that typically are going to take a year or two to ever see a trial. But his lawyer called me and he kind of just told me, "He knows what he did. He wants to confess, and he's got a lot more to tell you." And again, it doesn't happen every day so obviously my ears perked up, and we were certainly interested and wanted to hear what he had to say. Was a little bit concerned that, you know, sometimes these guys will play games with you and send a message through their lawyer that they want to talk, or they have information, but, you know, it's always well, what do they want? And you have to sometimes make some difficult decisions on way - are we going to cut this guy a better deal than we normally would in order to learn about other cases and help bring closure for our other survivors that we don't even know about. And, you know, we certainly had to have those discussions before we met with him. But I got together with the- the detective in the Dallas Police Department and the FBI agent and the three of us, we decided, well, let's hear what he has to say. So, you know, from my end, of course, I did put together a pretty big kind of a legal agreement about what this talk was about and that certainly anything he told us we could use against him. And after speaking with the known survivors we knew about, we took the gamble and

said, "we are offering you no deal. Your offer is life in prison, and if you want to talk with us still, great. You know, we certainly want to hear what you have to say." But we- we didn't see any, any scenario where it was- it was okay to cut him a deal.

Jaclynn McKay [00:16:15] What was his sentence at the end of everything?

Leighton D'Antoni [00:16:17] You know, we ended up having the talk with him. He confessed to over 30 - again, not an exact number - he said there was at least 30 known cases where he had done the same thing. And not just in Dallas but turns out he had been a kind of a traveling branch manager for a beverage and food company in the Metroplex area, and his route was basically southern Arkansas, Shreveport, Dallas, all the way through to, like, West Texas. And he confessed to cases in several other cities and jurisdictions. You know, we certainly, FBI for sure, followed up with law enforcement in those cities. There were reports of cases that seemed similar, nothing that linked to him forensically. And so I don't think any of those other jurisdictions, really, especially after we finished our case, investigated those cases, but he ultimately pled guilty on all four of our cases and received four life sentences.

Jaclynn McKay [00:17:13] It sounds like this was not the first time your office utilized forensic genetic genealogy as an investigative tool, but was this the first time it ever helped in case closure?

Leighton D'Antoni [00:17:22] Yes. So this David Hawkins case was the very first time in Dallas County that FGG had been used to identify a suspect, arrest a suspect, and convict a suspect.

Jaclynn McKay [00:17:33] As a prosecutor, do you have any advice for fellow lawyers on prosecuting cold cases?

Leighton D'Antoni [00:17:38] In our typical cold case sexual assault homicides, especially on the sexual assault cases, but you really have to be prepared to own the responsibility of law enforcement and the justice system's past mistakes - and that's prosecutors' mistakes, police officers' mistakes, and, you know, anyone really in the court system. There's a reason why, unfortunately, a lot of these cases have gone cold. Certain cases were treated differently than they should have been. There should be no case that a kit isn't tested, there should be no victim, a prostitute, drug addict. I have had a convicted murderer who, ten years before she committed her murder, had been raped. I brought her back from prison to testify as a victim in one of my cases because what happened to her wasn't right. So I think, you know, the attitudes of how we view these cases and investigation and prosecution, you really just have to be the face of those past mistakes. Own it and let your survivor know that you're here to right those past wrongs. I think that's probably the most important thing I've learned and the best advice I can give in terms of prosecuting cold cases, you know, using that victim-centered approach. And that's got to be done first thing, you got to do that upfront. Always try and do that during our in-person notifications on our sexual assault cases. Certainly, when we're meeting with the families on our homicide cases, you know, that's kind of first and foremost. Now, FGG is a little bit different in the fact that, in most of these cases, DNA testing was completed. Their profile didn't match to anyone in CODIS or a known suspect standard. So I guess in those scenarios, survivors are maybe not as distrustful of law enforcement as in the untested sexual assault kit cases. But at the end of the day, in those scenarios, you just have to ensure your entire team, you know, law enforcement, your victim advocates, your investigators, prosecutors, that they're all working together to support your survivor. You

know, you need to be prepared to act on behalf of your survivor. And sometimes, you might not agree with all their choices, but this is their case, their needs and concerns are really what's important. And this can be difficult for control freaks, and most prosecutor and law enforcement are control freaks. So it's definitely a journey that I've been on. But it's- it's made me such a better prosecutor. And I think, you know, we've all kind of gone through this learning process, and it's been amazing, and it's made us so much better.

Jaclynn McKay [00:19:57] I would agree with you, there are a lot of type-A personalities in law enforcement and as lawyers. So coming from a survivor-centered approach, what has the journey been like for you, giving these survivors justice almost 40 years later?

Leighton D'Antoni [00:20:12] So, you know, like many of the cold cases and serial cases we've worked before, the journey is different for everybody. The survivors in this particular case were all extremely relieved and grateful their cases were solved, no doubt about that. And they were all willing to participate. They were all willing to testify if needed, and that doesn't always happen, so we were very thankful for that. But certainly, the degree of interest or participation varied. But we had one survivor, and it's the one that e-mailed me that started this whole thing, she was really the one who not only kept this train alive for all these years, but once we were, you know, at the end of trying to solve it and solving it and through the court process was extremely involved. And she really wanted her story out there. She had done, and continues to do, many media interviews on the case, was one of the only survivors I've ever worked with who would always tell me every time I talked to her or saw her, "put my name out there, I want my name out there. Tell everyone my name. I want my story out there." And, you know, that's just something we don't do, even though she's requested it. But she then ultimately, when we did go to court and he did plead guilty and was sentenced to almost four life sentences gave unquestionably one of the best victim impact statements I have ever seen - and I still won't put her name out there - but if you Google "David Hawkins victim impact," you'll see who she is and her story. Dallas Morning News did a great job writing about that. So again, they're all different, but it's that closure and I think sense of security. And this is, you're never going to take this away, you know, that bell has been rung. But I certainly think in this case and for these survivors that the closure and just a feeling of safety that kind of came over them, that's an incredible feeling to be able to help provide that for somebody.

Jaclynn McKay [00:22:06] You mentioned that while working on these cases, the prosecution has to be the face of all the system's mistakes. Do you think that has helped with getting survivors to stay involved throughout the process?

Leighton D'Antoni [00:22:19] Absolutely. And I think having been a public defender for six years and really having lived in that world where, you know, marginalized and people - again, prostitutes, drug addicts, mental health victims - I had had really a lot of one-on-one time with these types of people. And so I could completely empathize and kind of understand where they were coming from. And I tell them every time, I am a sexual assault homicide prosecutor - I don't care about dope, I don't care about prostitution, I don't care about any of that stuff. I had a case once where my investigator and I had a still working prostitute survivor, and she would only meet with us when she was working. And so we would go to the corner that she worked and she would jump in our car in between clients and kind of talk to us. We had to do like a pretrial interview or whatever it was. She was very upfront about it, and we were just like, you do you. But at the end of the day, I think if you're going to be successful in prosecuting these cases, and certainly the cases that we call "fresh" or new cases, but when we're talking about cold cases, they need to feel comfortable with you. They need to trust you. So, yeah, you have to own all the bad

stuff that happened before, but just let them know you're not there to do anything but help them get the justice they deserve.

Jaclynn McKay [00:23:42] When prosecuting cases in a victim-centered approach, you spoke about working with other entities such as victim advocates, law enforcement, and investigators. Can you speak to the collaboration and cooperation that is needed within a multidisciplinary team to get resolution on cases like these and how best to support survivors?

Leighton D'Antoni [00:24:04] When we originally were awarded our SAKI grant back in 2015, you know, certainly any time you get a federal grant, there's going to be requirements, and a big part of the SAKI grant is the structure of how your team is going to be. And having prosecuted all kinds of cases and back as a public defender, I really didn't know what a multidisciplinary team was. And so I remember reading through the stuff and then you're going to have victim advocates. And, you know, we had victim advocates in our family violence and child abuse divisions and there's community-based victim advocates, but they weren't really ever too involved in our cases. And so that was new for me. We had investigators that were going to be specially assigned to our team. At the same time, Dallas County as a whole was formulating what we call our SART program, and this is, you know, all those folks and then we also bring in the SANE nurses and the hospitals and pretty much anyone who might be involved from the moment somebody reports a sexual assault 'til, you know, the case is adjudicated or the resolution of the criminal case. And everyone kind of for a long time was working independently on their own. They kind of saw things - you know, prosecutors see things very narrowly, victim advocates certainly were seeing things narrowly. And so very important for us to all get together and kind of get on the same page and collaborate. Again, kind of like with the FGG stuff, I was just so blown away about all this new stuff and absorbing all these things and how important it is to have your victim advocate involved in this entire process. Because, again, as I was saying, prosecutors and especially law enforcement, we're pretty control oriented and one track, so being able to take a step back and realizing, wow, this is such a bigger picture than we ever realized, and it's impossible to actually be able to say, you know, I can understand what someone's going through if you haven't been a survivor of sexual assault, but you try to do everything you can to understand that. And so having a team of victim advocates and, you know, working in the community with our SANEs, the sexual assault nurses, and seeing everyone coming from their perspective so we meet all the time. You know, we're bringing in all the hospitals in Dallas, and Dallas is a big city, getting buy-in from them. We're getting buy-in from the community-based non-profits, those advocates who are outside our office. And we all just kind of open each other's eyes to different things, things that we wouldn't have thought about. You know, every meeting we go to, they're telling me something, "oh, I never would have thought about that." We try to always explain to them from our view for having a successful prosecution, especially if we have a survivor who that's what they want. You know, at the end of the day, that's my job, is to get them justice. It's not always an easy road, but it certainly has made it- I can't tell you how much improved our office has been in successful prosecution of these cases. And I think we're starting to build a trust in our community. There's nothing more probably terrifying than being a sexual assault survivor who might have to go into a courtroom and testify in front of, you know, not just 12 strangers, but many times a full courtroom full of people about the most horrific moment of their life. But having that MDT to get us all in that frame of mind of how to approach these cases is very important.

Jaclynn McKay [00:27:31] Through your experience with FGG thus far, are you excited about the prospects of using it as an investigative tool for solving previously unsolvable crimes?

Leighton D'Antoni [00:27:41] It is unquestionably the most exciting development in my career as a prosecutor. It has the potential to solve countless cold cases, and I think while cold cases seem to get the recognition and kind of the media's attention on FGG, it can be used in fresh cases, in new cases. It's almost a limitless possibility. We've worked with two of the labs that are kind of the industry leaders in this field in the SNP testing - that's Gene by Gene and Othram - and having now worked multiple cases with them, and I'm a prosecutor, I'm skeptical. I was a public defender, I'm just skeptical of everybody, you know, you need to always prove to me kind of that this stuff works, and I have total confidence in their work on both the forensic lab testing side of FGG, the genetic genealogy research that they do to identify suspects based on that testing, and having spoke to national leaders, FBI crime lab, and other labs across the country, this is the real deal. I mean, it's solid, great science. And so any time I can get my hands on a forensic investigative tool that is, you know, and all of the scientists and the people way smarter than me are able to tell me "Yeah, this- this is good stuff," and I see that, it's just exciting what the potential is for it. The FBI and the Department of Justice have done a tremendous job creating, you know, the proper procedures to ensure not only that the laws are followed- and again, certainly depending on where you work in your jurisdiction, you need to make sure you understand what those laws are, especially as it relates to this FGG process- but again, FBI, DOJ, you know, they're taking privacy interests of citizens that make sure those are protected. And it's just- it's great to be a part of.

Jaclynn McKay [00:29:30] Forensic genetic genealogy can be used as an investigative tool, as we've talked about, but we also know that it shouldn't be presented in trial. Can you explain why it is so important to confirm any genealogy leads with STR DNA testing?

Leighton D'Antoni [00:29:45] Yeah, and this is extremely important. And so, you know, for all you prosecutors or law enforcement who are working FGG cases or will in the future, you really need to understand that FGG is just an investigative tool to help identify suspects. Nothing is going to change in terms of the forensic evidence presented at a trial or to a jury. You know, we're still relying on traditional STR testing to confirm that this is, in fact, the correct identity of the suspect, that the defendant is this person because the DNA profile matches the DNA that was recovered from whatever evidence you have. SNP testing and FGG cannot give you those, you know, astronomical probability inclusion stats that STR can. And as a prosecutor, my favorite thing in the world is the one in, you know, 300 gabillion numbers that no one even has heard of who take up an entire PowerPoint screen for how many zeros there are - that's the best thing in the world. You're not going to be able to get that with the SNP testing results. Maybe one day they'll decide, and I've talked to some people about this and we're talking decades or many, many years that there'll be standard SNPs that can be used to make an inclusion statistic, but that's probably not going to happen in my career, in my lifetime. So we're still relying on that STR testing; STR DNA testing is still the forensic gold standard for presenting evidence in court. So there really is no scenario where you would ever have to present your SNP testing to- to a jury. Ultimately, it's an investigative tool that helps you identify a suspect. Now, certainly how you end up getting that suspect standard- whether it's done through a trash pull or some of the other ways that it can be done- that might be something you present in court, but, you know, we've been doing that for a while now. So while it's certainly a very new and different part of our investigative process, once we actually get to the trial, nothing really changes.

Jaclynn McKay [00:31:46] Do you have any last-minute thoughts for our listeners before we close out our episode?

Leighton D'Antoni [00:31:50] I do, and I guess I'm going to make a selfish pitch here, but I would say the major obstacle I think right now in using FGG on more cases right now is funding. You know, I'm a prosecutor, but I can't tell you how much of my time now I'm spending talking to various government agencies and groups and really anybody trying to get money to pay for FGG. And that includes not just, you know, the initial SNP testing, but the genetic genealogy work that has to be done and the investigative side that has to be done that law enforcement has to do certainly to secure that suspect standard to be able to compare to the original DNA. Most local law enforcement agencies just don't have the budget for that. Our office doesn't have the budget for it for a lot of this forensic testing and the investigative side. Local crime labs are not equipped to do this testing, so I really need government to step up and start really supporting these efforts financially - you know, funding for SNP testing, again, those investigative resources to get target suspect samples, the tree building. We've been really, really fortunate and blessed to get funding from FBI. There is a nonprofit Season of Justice that has been tremendous and is really kind of one of the leaders in raising money for these types of cases, but we really need local government funding to step up. That support right now is lacking. And again, I get it, it's new. It's really just kind of bursting onto the scene. But to anyone listening who has input or power to help fund the use of FGG in criminal investigations, especially at that local law enforcement level, please know that there will be no better return on your criminal justice crime prevention money spent than the money you allocate for FGG.

Jaclynn McKay [00:33:35] Since local crime laboratories are not equipped to perform SNP testing, thus requiring the involvement of private laboratories and other companies, is that part of the reason why there is a funding issue when it comes to utilizing FGG?

Leighton D'Antoni [00:33:48] Yeah, I would say that's certainly probably the primary and biggest hurdle that we have right now because if we can get that part done, we get that SNP testing completed and someone's able to identify a suspect, and I go to a local law enforcement agency or I go to my bosses and I say, "hey, you know, I've got a capital murder suspect, a potential serial killer. Here's his name." We're serving it to you on a plate. They'll find the money to pay for kind of the rest of that part, but it's that initial part that we have a lot more difficulty getting funding for. And again, like I said, you know, having an outfit like Season of Justice, amazing - a nonprofit who's dedicated to helping raise money for this testing - but there's so much out there, they can't do it alone. So, you know, at the end of the day, we do need local governments, I think, to step up and start making this a priority for the money that they're spending. And I know that there's federal COVID money that comes into a lot of these local government jurisdictions. I see how it's being used, and again, if you have any say in the matter, having some of that money spent on this, there absolutely will be no better return on your investment.

Jaclynn McKay [00:34:56] Well, thank you, Leighton. I have really enjoyed today's conversation and appreciate your time and willingness to discuss all this with us.

Leighton D'Antoni [00:35:03] No, it's been great. Thank you for having me. Anytime I can have the ability to talk about FGG, it's a good day.

Jaclynn McKay [00:35:09] If you enjoyed today's episode, be sure to like and follow Just Science on your platform of choice. For more information on today's topic and resources in

the forensics field, visit ForensicCOE.org. I'm Jaclynn McKay, and this has been another episode of Just Science.

Voiceover [00:35:30] This episode concludes our Case Studies: Part 1 mini season. Next season, Just Science will be covering various topics on human identification. 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.