

## Just the Grim Sleeper Serial Killer

**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 five of the case study season, Just Science sat down with Rockne Harmon, forensic consultant and former senior deputy district attorney for Alameda County in California, to talk about familial DNA searching and the case of the Grim Sleeper serial killer. From the mid-80s to 2007, Lonnie David Franklin Jr., otherwise known as the Grim Sleeper, was responsible for at least 10 murders in California. Although he started killing in the 1980s, large gaps of time between murders and underutilized DNA evidence left at the crime scenes made it exceptionally difficult to find a suspect. Franklin was arrested in 2010 after investigators used familial DNA searching to connect DNA recovered at multiple crime scenes to one of Franklin's relatives. Rockne Harmon was instrumental in convincing the California Department of Justice to implement familial DNA searching in cold cases, ultimately leading to the arrest of the Grim Sleeper and many other offenders. Listen along as he discusses familial DNA searching and the case of the Grim Sleeper in this episode of Just Science. This season is funded by the National Institute of Justice's Forensic Technology Center of Excellence. Here is your host, Dr. Mike Planty.

**Mike Planty** [00:01:53] Hello, welcome to Just Science, I'm your host, Dr. Mike Planty with NIJ's Forensic Technology Center of Excellence, a program of the National Institute of Justice. Here to help us today with our discussion is guest Mr. Rock Harmon. Welcome to the podcast, Rock.

**Rockne Harmon** [00:02:07] Thanks for having me, Mike.

**Mike Planty** [00:02:09] Rock Harmon is currently employed as a consultant to numerous law enforcement agencies dealing with such issues as cold case investigation and other issues related to forensic DNA typing. He's currently an instructor at UC Davis in the Master's of Forensic Science Program. He's retired - and he retired in 2007 after a 33-year career as senior deputy district attorney for Alameda County, California. You may know from the O.J. Simpson case. He's a fellow of the American Academy of Forensic Sciences. He is considered a pioneer in the development and advocacy for the use of DNA evidence in the criminal justice system. At Alameda County, he developed a highly successful protocol for solving old and unsolved cases using DNA typing. He was the driving force behind California attorney general's decision to implement the topic of our discussion today, familial DNA searching in California that led to the arrest of the Grim Sleeper serial killer in 2010. So our topic today focuses on current issues, approaches, and positions involved with familial DNA searches as they apply to criminal investigation. Rock has been involved in a national discussion in the development, like we said, with California's use of FS DNA searching. We're going to talk through examples with the Lonnie Franklin case. Lonnie Franklin was better known by the name The Grim Sleeper who was an American serial killer responsible for at least 10 murders and one attempted murder in L.A. He was identified in part through FS. So first, Rock, what is familial searching?

**Rockne Harmon** [00:03:35] Familial search is probably the best thing to do, because I know genetic genealogy has gotten a lot of airtime, is just compare it very briefly to familial searching. Familial searching utilizes, the government constructed, legislated or authorized

offender databases while genetic genealogy relies on private databases to construct family trees and ultimately through genealogical investigations, focus a - develop a lead - collect a sample. Familial searching depends on the hereditary nature of DNA and the question that gets asked by familial searching is, is there a close relative of the person who left the material evidence at the crime scene in our offender database? For these purposes, close relative is limited to parent - child and full siblings, as opposed to genealogy where the sky's almost the limit, it seems. So that's the comparison in contrast with it. Probably a good idea to describe the process. States that have developed protocols usually have a protocol similar to what I'm going to describe. Familial searching doesn't even consider until after the CODIS search has produced no hint. At that point, most states have a review process that requires there to be no existing leads, that the DNA profile needs to be a single source profile or clearly deducible profile from the mixture. In addition, another criteria is that the case has to be serious. There must be additional sample for additional typing down the line and typically states sign a MoU with the law enforcement agency and the prosecutor's office. So there's an agreement and understanding from the beginning that if the source of the DNA is identified through familial searching, the prosecutor will charge and prosecute the case. So generally speaking, that's how the process works.

**Mike Planty** [00:05:51] Currently, this is up to the states. The FBI does not conduct these types of searches. What are your views about that? And maybe you can explain some of the rationale behind the current status for the federal government.

**Speaker 3** [00:06:03] You know, I wish I could explain it because I'd probably be invested heavily in the stock market, so, but I'll talk about it. The FBI has no control over what states do within their own state and using their own state database. The only control the FBI has is over whether or not searches can be done at a national level. It, practically speaking, is premature to even talk about that until all 50 states are doing familial searching. So you're correct. It's been left up to the states. The FBI has done little to encourage or stimulate familial searching within the states. It's a topic we've been talking about for probably 15 years, so I don't think that's ever going to change. At the present time, about 15 states are utilizing familial DNA searching. And so in looking at the process in those states, each state reviewed their own state law that created the database. So I think it's important to talk about generally what those laws do. Those laws describe who has to provide a sample and what the state is going to do with it. In each state, in addition to describing who has to provide the sample and when they provide the sample and how those samples are collected, the state laws then go on to describe the reason that these samples are collected. In every state law that I've seen, and I've seen a lot of them, has a statutory purpose. The statutory purpose is pretty obvious - it's to solve crime or some states have the phrase criminal identification. But what I can tell you in California and a few other states where I've been involved in discussions and process - it's a very simple conclusion to say familial searching - the only reason you do familial searching is the only reason you have a state database and that is to solve crimes. So each state, including California, that has decided to do it, realized that their law implicitly authorizes the use of familial searching because it achieves the same statutory purpose that CODIS or SDIS does within their state. So that's the legal rationale. Just to put it another way, and to kind of conclude this little topic, familial searching is merely the rules that states use to achieve the statutory purpose, because the only reason states have a database is because these laws created the authority to do it and the authority includes the purpose, and that is to try to solve crimes.

**Mike Planty** [00:09:10] And I think it makes a lot of sense to most people out there. It's just like fingerprints, right? Commit a crime, put it in a database and commit another crime and

we can connect you to that evidence. So I think in terms of the general approach, it makes a lot of sense to folks - I think to a layperson - about the utility and value of that of that database. I wanted to push back against this at this point is who gets into the database? And originally, the DNA database may have focused primarily on felony convictions, but now that might have expanded and what goes into a DNA database may include a lot of minor offenses.

**Rockne Harmon** [00:09:48] Sure, absolutely. And if people have reservations about that, it's about having them in the database at all, not about whether or not a familial searching should be used to find a convicted misdemeanor who's committed a rape or murder.

**Mike Planty** [00:10:04] And just to clarify, when you say that the states are doing their own searching, is that restricted to the state database or do they have access to the national database?

**Rockne Harmon** [00:10:14] That's a good question - only to the state, because remember I said earlier that the FBI doesn't control what the states do within their own state database. I know there have been a few instances where a state not having solved the crime with familial searching has asked another neighboring state to do familial searching and there's nothing to prevent that from happening. I'd like to think that it would happen more often.

**Mike Planty** [00:10:41] So that might be one thing to think about - our regional database collaborations or data use agreement - where it's - because the whole notion is that offenders are not often limited to states. Right? There's a lot of offenders that move throughout the states. We know that. And so the reduction in the value by the state being limited to their own database could have an impact in terms of really, truly understanding the effectiveness of this tool.

**Rockne Harmon** [00:11:05] Sure. You know, you raise a good point there. And it's something I should have said at the very beginning, the failure to have access to the national database really doesn't limit the potential for this very much because we've seen historically 85% of cases that get solved get solved where the state has both the offender and the crime scene evidence. So at most, you're missing potential solving 15% more cases by not being able to search nationally.

**Mike Planty** [00:11:43] Gotcha. So to tell us about - you were very instrumental in California's process. Given what we faced at the national level, why did this work out in California? Describe that process and how that developed?

**Rockne Harmon** [00:11:53] Sure, I think is important because it is pretty clear at this point that if somebody doesn't take this on and make it an issue, it's just not going to happen. There are a lot of reasons for that, I won't list them but there are a lot of them. Interestingly, in probably the early 2000s, I was doing some NIJ funded cold case training around the country, and I teamed up with a good friend of mine, Mitch Morrissey, the former Denver D.A. He had been to the UK with his lab director, Greg LaBerge, and they actually got a lot of exposure to familial searching - was a subject we had heard about, but it seemed to be taboo in this country. So the more Mitch and I talked, the more we realized there was no reason this wasn't being done here. I was still working as a prosecutor then. I found a local case that seemed to be really pertinent to this and screamed out for something more than just CODIS and I started making inquiries with our California Department of Justice - people whom I've worked with from the very beginning. There was

a lot of pushback so that made me learn more about it and that made for more pushback, and by the time we exhausted all of our conversations, it became clear the resistance was not on a scientific level. The resistance was on policy or a legal philosophical level. Well, that's my world, not the scientist world, and so we began a process in the forensic evidence committee. We had - and I don't know if states have this, but it's a good idea, I think forensic scientists in California like it because it gives them a sounding board and it gives us a sounding board with them. And through that group, we had representatives from every major county in California - that's a lot of people - we began a series of meetings. Now, having understood what the pushback was, and that was the easy part, to work through the attorney general's office. California has a little different set up that made this work. In California, the attorney general owns the database. In most states there's an attorney general and then there's a state police director that the lab falls under the state police. That just means there's another bureaucracy or another bureaucratic level to it. It shouldn't change the process at all. So we talked about every issue under the sun except science. And the attorney general approved that we would do it. This is Jerry Brown, you know, this is a liberal state like California. Because one of the interesting things that people fail to exploit is people with liberal and progressive ideas are very sensitive to victim interests. And we've always been sensitive to victim interests in California. So that brought me right up to my retirement. Cal DOJ hired me for a year to work with them to review their scientific approach to it and develop the policy and protocols that I just generally described. It took a lot of effort. I know in most states if a police detective calls up the state lab, the state lab person will say, we can't do this. And one of the things I've learned, I always wanted to get a T-shirt that said this, can't means won't, because once you sit down and identify what the issues are, it really is can, it's not won't. And I've tried to help investigators around the country and they usually hit the wall at I can't do it. So that's why California did it. I'm not sure - and I know Colorado and Mitch Morrissey undertook a similar successful effort in Colorado. If it doesn't happen that way, sadly, some states did it on their own. I give them a lot of credit - Michigan, Ohio, Wisconsin, Utah - I know I've left somebody out, but some of them just took their time to develop it. It's pretty much dead in the water these days, I think everywhere except for California.

**Mike Planty** [00:16:17] Interesting. And so, I mean, I really like the focus there on the victims' rights because that's really an important issue here, right? Many of these stories, it's really a victim's family or it's a recognition of victims' rights that could be a huge driver, as you say, because the science is there. No one is disputing the science. And it's about how you can properly represent the victims and whether that supersedes some of these issues that have been raised around privacy interests. So, yeah, let's talk about what is the true value of the familial DNA searching, as you stated, beginning without a direct match in CODIS. What we're talking about here is utilizing this technique to just continue to identify investigative leads, especially around cold cases.

**Rockne Harmon** [00:17:01] If these investigative leads are pretty focused, father, son, full sibling. So once there is a lead the investigation is much more focused. It's not a criticism of genealogy because genealogy reaches out much farther, but their investigations can be very, very complex going back many generations. So if familial searching works, you're almost done when the investigative lead gets produced but cold cases - it's just a supplement and complement to CODIS - to what we're already doing in cases that clearly were never going to get solved by CODIS.

**Mike Planty** [00:17:44] And the point I think you're also making - it is focused heavily on the first order relatives, right? It's an offspring or a parent and so one of the underlying

assumptions here is this clustering of criminal activity within families, right? Because this wouldn't work if criminal behavior was unique to families.

**Rockne Harmon** [00:18:02] Exactly you know, I say - you're polite. I say it, crime runs in families. And I know people cringe when you say that but that's why this works. Just imagine a beat cop has had a case submitted for familial searching get back and he's got a potential close relative. So the investigation is pretty focused, but there can be no doubt that crime runs in families. The seminal [article that Fred Bieber and David Lazar](#)<sup>1</sup> has old data that clearly supports that and continues to support that. It's a source of argument in another forum repeatedly, or why that is, but it is what it is. And that's why this works.

**Mike Planty** [00:18:53] And in fact, you can put aside the criminal genetic or the intergenerational and just focus on the one finding - 46% of jail inmates have at least one close relative who has been incarcerated. That alone increases the value. Whatever the root causes of that can be, like you said, discussed in a different forum. I think one other value that you mentioned and others, I think is about exonerations. This could have the flip side - exonerations of suspects in the system.

**Rockne Harmon** [00:19:21] Yeah, it always does. I haven't seen it done in a criminal case to exonerate somebody but that's just because in part because how little it's used or how few states use it. There is a case in northern California, not recently, where genealogy exonerated a guy. I'm not sure if you're familiar with that, so whatever DNA identification tool we have can be used to do whatever it can do, you know, whatever that truth that it provides. And one of the other points that people fail to appreciate - familial searching is fairly successful, ok, and at this point, I think it's clear genealogy is much more successful, but in the report that we did through RTI a few years ago, we demonstrated, and this is just anecdotal information, so, it had a success metric of about 25 to 30% percent. And just so people don't think we're cooking the books there on these numbers, using the metric the same way CODIS calculates its success rate. So, for example, if an offender gets uploaded and matches, if the Grim Sleeper were solved by upload, that would be 10 successes. OK, so it's not how often does a case get solved. That's a different question with a different number both for CODIS and for familial searching.

**Mike Planty** [00:21:00] So we did touch on some of the pushback that you see with this searching. One of the things that could counter some of this pushback is the use of safeguards. Right? And the need for safeguards so that you don't necessarily have what people are concerned about, broad sweeps. So what types of safeguards could enhance and compel folks to utilize is a little bit more?

**Rockne Harmon** [00:21:25] Sure. We're at peak election times. So one of the things you get used to the legal system is you always know what the criticism is going to be and you either ignore it or you face it head on. So in the context of familial searching, we already have a lot of safeguards about our offender database. Every state does. So that's one layer. The Fourth Amendment is always available to criticize or to raise issues about police activity - searches and seizures. So, for example, one of the statements that's very clear is, there's nothing about familial searching itself that implicates a person's Fourth Amendment rights. And if that's not clear enough, there's another way to make the point and that is, there has never been a Fourth Amendment challenge made to familial searching in a case that's being prosecuted for the simple reason that the Fourth Amendment can't be used in this context. OK, I could go on to talk about - talk like a

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<sup>1</sup> Bieber, F. R., Brenner, C. H., & Lazar, D. (2006). Human genetics. Finding criminals through DNA of their relatives. *Science* (New York, N.Y.), 312(5778), 1315–1316. <https://doi.org/10.1126/science.1122655>

lawyer about that but given the nature of the challenges that defense attorneys make, it's a miracle that none has found a way to craft a legal objection under the Fourth Amendment. But that's really the way it is when we talk about privacy concerns - I mentioned state laws have a privacy about the offender database. One of the misconceptions if you read law reviews about familial searches is that are false leads and by false - you know, I just realized I haven't described a critical part of the process. I probably should have done this in the very beginning. Familial searching occurs after no hit in CODIS. It occurs outside the CODIS software using a special software that's designed to produce a list of potential people from the offender database who could be close relatives as we've limited it, of the person who left the evidence. They're ranked from the highest likelihood to the lowest likelihood. That's not the end of the process. The police have no involvement at that level because chances are it's not going to be anybody. This is just an attempt to see if it's somebody. The next step in the process is to use Y-STR male chromosome typing to confirm or refute whether anybody on that list is a close relative. And I didn't say could be, I said is because the power of the search software in the Y-STR is clearly enough to resolve. In a majority of cases there's no concordant Y-STR result. That's the end of the familial search process.

**Mike Planty** [00:24:31] Like you mentioned, law enforcement is not involved at all in that process. This is a forensic search.

**Rockne Harmon** [00:24:37] These and these samples have numbers on it. And there's no interest to law enforcement at that point, because if I said to a detective, I'll give you this list of 150 people in California. But right now the chances are about three in 10 and it's going to be anybody on that list. He's going to say what I would say - call me when you finish working over the list there. Occasionally, and I say occasionally, depending on our success metric, there will be a concordant Y-STR profile. That's the investigative lead. The identity of that person is the police in California and elsewhere. That's the point of education where the value of that is explained to investigators and I think when we talk about the Grim Sleeper, you'll see how short that conversation can be. Whenever there's a lead produced, it's almost always just one person. There have been a small number of instances where this Y-STR typing produced more than one investigative lead. From what I've learned, I think Texas, Wisconsin and maybe some other, maybe Virginia, occasionally are two leads. And guess what? They're brothers. So that's kind of touches on the privacy part of this whole thing. This either gives you something that really close to what you're looking for or nothing.

**Mike Planty** [00:26:09] And that's a really important point, right? I mean, the scope is really limited. Anonymity plays an important role and the investigation or the intrusion into the actual person or suspect life comes after a very careful and very narrow search. And that's when traditional investigative processes just take over.

**Rockne Harmon** [00:26:30] Exactly and that's where the Fourth Amendment protects people. What the police do with that is clearly reviewable under the Fourth Amendment.

**Mike Planty** [00:26:39] Yeah, I think there's a huge distinction, because we think about these policing databases, it's really about your point earlier about who goes into the system is a very different question than leveraging the information that's in the system. And the point some people think about false positives, say with facial recognition that's been a hot topic where you have true false positives, no one's, again, challenging the science of this searching. So those are really important points. Let's turn to the Lonnie

Franklin case. We can pull some of these themes together and you can walk us through that and highlight some of the points we've been making.

**Rockne Harmon** [00:27:15] And you know what the successes provide that confidence and that rebuttal, that refutation of everything that anybody could say about it and as luck would have it, the Lonnie Franklin case says it probably more powerfully than any other case that I'm aware of where it succeeded. It was the first case done by Cal DOJ because they had all this evidence connecting all of these murders and it just screamed out for that. So the process, as I've described it, the two-part search rank and Y-STR process produced no leads. You go, well that didn't work very well, right? Well, most states have a resubmission policy that you can do it in six months or a year so a year later, it was resubmitted. I think in the number three position, because this search ranking it's just an estimate based from a whole lot of people and it's not always going to be the number one person. Practice has shown it's almost always somebody pretty high up there. So in I think it was the number three position a year later say, you say holy cow, look at this. I'll tell you about what this was in just a second. When you look at the guy in the number three position to say, oh, he wasn't there last year. Well isn't that nice. That's why we resubmit these things. When the scientists looked at the data from the evidence and they lead the investigator lead, you know, you could look at and say it's got to be a father son. There's a shared allele at every locus. The investigation consisted of - these are old cases - who's the guy in the number three position? Well he's pretty young, he could not have committed these crimes. It's got to be his father, not his son. And that's how the investigation proceeded at that point. You know, they obviously did a lot of surveillance. They wanted to watch the guy. Turned out he lived right in the middle of the area where some of these unfortunate victims who were dumped after they were murdered. But as I said, the son was not in the database the first time. He's in there now. So what you can see from this when you talk about the privacy concerns, and that is, it's not going to pick somebody else when the close relative is not in there. When he gets added, it's going to jump on it. And so the memorable video clip that I'd love to see that shows the cops posing as waiters at a pizza joint - the only time anybody in that restaurants ever worn gloves when they collected the utensils and the pizza from the table. The evidence matched him and led to a lot more physical evidence that ultimately contributed to his conviction. And just to go back to the point I mentioned about the Fourth Amendment, the only Fourth Amendment issue the defense could raise about familial searching was in the collection of stuff from the restaurant when they were wearing gloves. It was nothing about anything else. The jury never learned about familial searching. So it's not what gets presented very much like genealogy. It's the ultimate collection of the sample, however that's done, and the fact that it matches. And so the Fourth Amendment can be used to scrutinize how that sample is collected. But there is nothing about, inherent in either of the processes, that raze or violating his Fourth Amendment rights.

**Mike Planty** [00:31:11] So what's really interesting, again, just to connect those things, Lonnie wasn't in the database. His son shows up - there is again, a match, as you said, through this familial searching. But then that's not what he's prosecuted on, right? No. They went and got his DNA from, like you just mentioned, through discarded pizza and silverware and glasses. And then from that, there was a direct match to the DNA recovered from the crime scenes. And so, again, it's leveraging those connections and those relationships to further confirm. And as this case unfolded, of course they found a lot of other evidence linking him to these crimes, so it's just one piece of the puzzle, but without it, these crimes were still probably been unsolved.

**Rockne Harmon** [00:32:00] Absolutely.

**Mike Planty** [00:32:01] So what are the lessons learned and maybe recap? What other research or work do you see could be needed in this area?

**Rockne Harmon** [00:32:10] You know Cal DOJ has moved ahead. It's not a huge step, but it's a big step to close up the gap there. You know, I've talked about the Y-STR typing. Well obviously we know that can only be used on male samples and occasionally, not really often, females will show up on that candidate list. I forgot to use that term - that list prioritize occasionally they're females that show up there. Cal DOJ has developed a protocol to go back on those cases because they're still unsolved, to have females high up on the list to address them using the additional new CODIS markers because they provide enough information to then confirm or refute the relatedness. And there have been two or three successes already where using the male only Y-STR part of the process. So people used to use that as a weakness. It's not a weakness, it's a limitation that now has been overcome in those states that want to implement it. I think at this point, I don't know if anybody wants to encourage this anymore. I don't know how many of you in your audience are investigators or prosecutors, but clearly after all these years, it's not going to come from the lab people that are already pretty busy with things. I wrote a commentary in Forensic Magazine a few years ago called [Going Beyond CODIS: Rape Kit Testing is Not a Panacea](#) - and it's not a criticism of rape kit testing, but it's talking about cold hit tracking, which is another touchy subject, but also using familial searching for the type of those new rape kits. We ought to use every tool to squeeze every success we can out of them. Genealogy has spread for the simple reason that all that legal discussion that we talked about, you can do genealogy if you have the money to do it. You don't need to have a conversation about your state law or anything like that. So there's no hurdles to it, except money. You know, I think it's pretty clear - and one of the things when I look at genealogy successes, for those search successes, one of the things we've seen is that some of these cases that we're solving using these tools should have been solved by CODIS because the guys were in CODIS. There's a recent NBC article to that effect. Be nice to see that kind of introspection, because we spent, I don't know how many millions and millions on CODIS, but - and we're still - if we allow people to not be in CODIS because they don't want to be in CODIS - that's pretty motivated - that's a pretty good motivator not to be in CODIS if you're a serial murderer or serial rapist. Just I think in closing, familial searching is just another tool to eke out more crime solutions than CODIS does and genealogy. I mentioned genealogy seems, seems I say because it's not all - all this information isn't public, it seems to be more successful than both - familial searching in CODIS. But there's no reason to think one process is going to work instead of the other. In fact, the premise behind them is totally different. We talked about the premise with familial searching - the premise of genealogy is a distant relative, some that use one of these services and is accessible through one of the few that are available. So it's really a crapshoot to pick which one. I gave a talk a couple of years ago, which one do you do first and there's really no answer. Law enforcement should have both of them going after CODIS at their service to try to solve these crimes. And so if we don't have that, then typing all these rape kits, we're really tying one hand behind our back by doing that.

**Mike Planty** [00:36:30] Yeah, just really trying to exploit all the technology to the benefit that we can really make these connections that you're really just described. Well, I'd like to thank our guest today Rock Harmon for sitting down with Just Science today. Thank you very much.

**Rockne Harmon** [00:36:43] My pleasure, Mike. Good talking with you.



**Mike Planty** [00:36:46] 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 field of forensic science, visit [ForensicCOE.org](http://ForensicCOE.org). I'm Mike Planty, and this has been another episode of Just Science.

**Voiceover** [00:37:04] In the next episode of Just Science, we sat down with Karen Oswald, senior evidence specialist with the Suffolk County Police Department in New York, to discuss methods for identifying fingers and hands captured in evidentiary photos. 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.